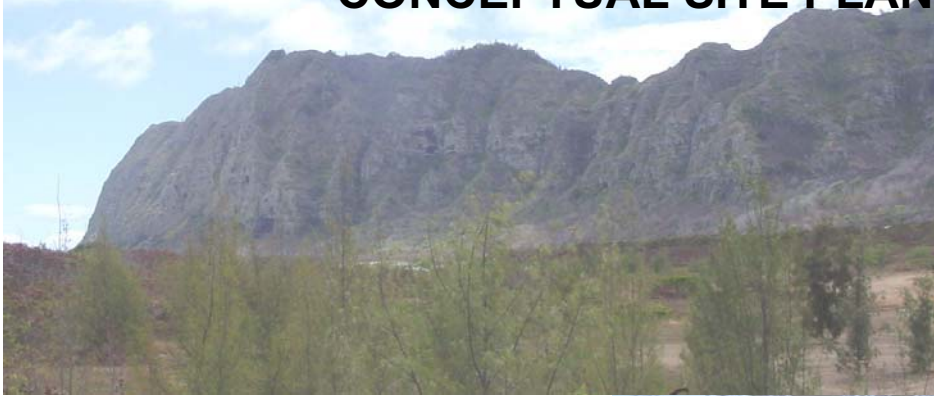


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# WAIMANALO COMMUNITY BUSINESS CENTER

## SITE SELECTION STUDY AND CONCEPTUAL SITE PLANNING



Prepared for:  
City and County of Honolulu  
Department of Permitting and Planning



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Prepared for:  
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Prepared By:



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# **Waimanalo Community Business Center**

## **Site Selection Study and Conceptual Site Planning**

### **Errata**

The following clarifications were overlooked in the final printed version of the Waimanalo Community Business Center Site Selection and Conceptual Site Planning, January 2008:

**Section 2.3.1, Page 2-8 is revised to read as follows:**

“Currently, Waimanalo incorporates the Marine Corps Training Area Bellows and Bellows Air Force Station and are both located on the same site. The Marines Corps Training Area is located in the southern half of Bellows and Bellows Air Force Station is located northern half, near Waimanalo Stream. A portion of Bellows is designated for public use for beach, picnicking, and camping on weekends. As a result of a study on the continued military use of Bellows AFS and the Record of Decision from the Final Environmental Impact Study at Bellows, approximately 170 acres of land were identified to be released. Of the 170 acres, 25 acres were declared excessed to the Air Force requirements, but was transferred to the Marines after the State of Hawaii declined to accept it due to the noise restrictions placed on the parcel. Subsequently, it has been determined that the area identified for release is still needed for military activities, primarily as a buffer zone for Marine training exercises.”

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## EXECUTIVE SUMMARY

The Waimanalo Community Business Center (WCBC) was originally proposed in 2001 by the Waimanalo Vision Team No. 18 to assist community development, enhance its workforce via career training, and offer a base site for certain commercial activities presently operating in rural or agricultural settings. In February of 2004, the City and County of Honolulu contracted with Fung Associates to do this site selection study.

An advisory team was formed to ascertain specific goals and objectives in determining the WCBC's program needs and requirements. Through community suggestions and input from the Department of Land and Natural Resources (DLNR), Land Division and the Department of Hawaiian Homelands (DHHL), Real Property Assessment Division an initial list of twelve possible sites was developed. Of that twelve, six met the WCBC's program requirements in terms of site requirements and socio and environmental compatibility. The six sites were ranked as follows:

1. Combination of the Old Quarry Site with the Nakini St. Site (under DHHL jurisdiction).\*
2. Option A of the Old Quarry site (under DHHL jurisdiction).\*
3. Waimanalo Teen Project site (under DLNR jurisdiction).
4. (Tie) Part of Aruda Property by Saddle City Road and the Bellows site.
5. DLNR Kakaina Street site (under DLNR jurisdiction).
6. Option B of the Old Quarry site (under DHHL jurisdiction).

\*The first two sites are contingent on working with the DHHL and the Waimanalo Hawaiian Homes Association to develop the project.

Since the development of this report, the site ranked the highest in accordance to the stated criteria, Old Quarry Site + Nakini Street Site, has been targeted by DHHL for the construction of the Community Technology, Telehealth and Employment Center (CTTEC). According to the January 2007 report generated by DHHL, *Waimanalo*, locating CTTEC on the old quarry site is currently being worked out through an agreement between DHHL and Waimanalo Hawaiian Home Association (WHHA); DHHL has targeted 2010 as the completion date of CTTEC.

The possible placement of CTTEC on The Old Quarry Site, however, is not a deterrent from ranking this site as the best site for locating WCBC. In fact, as both the WCBC and CTTEC are focused on entrepreneurial and employment-generating services that benefit Native Hawaiians, it must be considered that both facilities can co-exist on the site reciprocally. Furthermore, it is apparent that DHHL and WHHA are wholly supportive of community initiatives such as the concept of WCBC.

The recommended next steps will involve the following:



- Coordination with the Project Champion, DHHL and WHHA to combine efforts for a successful project on the highest ranked site with minimal duplication
- Community outreach and support gathering is needed to continue the momentum for the project
- Once the site is secured, the various funding sources discussed in Section 3.3.3 can be approached for possible grants and endowments for design and implementation
- Once funding is committed, refinement of the programs, the operational details and the design of the structures can continue.

In summary, while this is a project beneficial to the Waimanalo community, there is a current lack of available appropriately zoned land within Waimanalo for a project such as the WCBC. Therefore, the project needs to be coordinated with a number of stakeholders and landowners such as DHHL and the WHHA or DLNR so that the project can meet its goals of enhancing the employment opportunities of the community by resolving entitlement requirements.

## SECTION 1: INTRODUCTION

With the dramatic backdrop of the Koolau Mountain and the serenity of the blue Pacific Ocean, Waimanalo is an idyllic setting. While many Waimanalo residents continue the long standing tradition of agriculture, there remain many residents unemployed or underemployed. Lack of appropriate skills, capital, and available, properly zoned lands make it difficult for residents to establish new businesses that are compatible with the existing rural character. Nevertheless, due to residents' economic conditions and the lack of suitable facilities, many entrepreneurs have proceeded with their business plans without obtaining the requisite land use and other governmental approvals. Although there are three small areas of lands zoned B-1 Neighborhood Commercial District located along Kalanianaʻole Highway, opportunities for certain types of businesses are virtually non-existent due to the lack of additional appropriately zoned land and the high cost of starting and maintaining a business in Hawaii.

Originally conceived by the Waimanalo Vision Team No. 18 via community input, the purpose of the Waimanalo Community Business Center project is to create a facility for career training opportunities for Waimanalo residents ranging from construction related fields to information-age industries, and to help residents who currently operate small businesses by providing a facility and grounds for training, new business start-up support, and secure storage areas. The proposed community business center is not intended to be a retail/commercial/industrial center, but rather a support facility for resident entrepreneurs starting a new business venture or existing businesses in the community. If a center with this capacity is not established at this time, Waimanalo residents with existing businesses will be denied the opportunity to relocate operations to more appropriate sites, seek employment opportunities at entry or unskilled levels, or seek trained employees from outside the community.

### 1.0 Goals and Objectives

---

Hawaii is in the midst of a building boom. One of the central goals of the Waimanalo Community Business Center (WCBC) is to provide qualified resources such as skilled labor for Hawaii's growing construction industry from a pool of well-trained Waimanalo residents and qualified businesses, while maintaining its rural and agricultural atmosphere. The vision of this project is two-fold:

- 1) To provide support services and facilities for existing and start-up entrepreneurs of the Waimanalo community; and
- 2) To help the unemployed and under-employed of all ages in Waimanalo develop job skills in construction and other fields for current and future job markets.

The WCBC is envisioned to contain the following components:

- An outreach training center providing programs and classes in vocational, technical, and construction related fields, as well as lifelong learning programs such as hula, cooking, or woodshop. The teachers and mentors are already available, but they have no facilities within the Waimanalo community.
- Classroom space and office space to help train residents in areas of potential employment and to provide business incubator spaces.
- Meeting spaces for social and cultural community groups. Shared office space and facilities for start-up businesses and entrepreneurs may also be provided as auxiliary services to the business center.
- Space for commercial driver's license training and accessory uses.
- Space for storage of supplies and equipment which will provide an option for existing businesses currently storing supplies within residential and rural neighborhoods, along with an associated parking area for commercial vehicles.

### 1.1 Project Scope

---

The scope of work included:

- Defining the objectives for a proposed Community Business Center in Waimanalo, Oahu through input from Advisory Committee.
- Formulation of an advisory team to review and advise on site selection and data.
- Researching, investigating, and evaluating alternative sites.
- Determining the most suitable and feasible site and compiling into a final report.
- Providing a conceptual site and facilities plan for the chosen site.

---

## 1.2 Method of Study

---

Fung Associates, the Consultant, in collaboration with the Project Advisory Team and the City and County of Honolulu, the Project Champion, developed a program to determine the scope, objectives, and criteria for the Waimanalo Community Business Center.

The Consultant examined and conducted a background analysis of the Waimanalo Project Area. Data pertinent to program development, site selection, and plan conceptualization was identified and collected through research, interviews, and visits to the area. During this process, suggestions for possible sites were recommended and visited by the Consultant. Photographs and initial evaluation are included in this report.

An Advisory Committee, representing a cross section of the Waimanalo community, was organized. They represented different sectors of the community but shared the goals and interest in this project for the community. This team helped to define the type of spaces needed, sizes of the programmed spaces, and gave input into the findings of the Consultant. The Committee met with the Consultant at various milestones in this project to make decisions that will best meet the needs of the community. Members of the Advisory Committee include:

- Andrew Jamila, Project Champion
- Ben Kama, resident/Neighborhood Commission
- Kevin Andrews, Waimanalo Chamber of Commerce
- Shannon & Jim Wood, Ko'olau News, Windward Ahupua'a Alliance
- Julie Dugan, Hawaii Job Corps Center
- L. Kaniau Meyer, resident
- Elizabeth Martinez, Olomana Sustainable Systems
- Joseph Ryan, resident
- Marie Richardson, resident/Neighborhood Commission
- Clyde Akau, resident

The report was presented to the Advisory Committee and the Waimanalo community for discussion and evaluation throughout various phases of the project. The recommended and proposed sites were studied in-depth to understand the constraints, advantages and/or disadvantages, characteristics, and the context of each site.

## SECTION 2: BACKGROUND

### 2.0 Brief History

---

Waimanalo, which means “potable or sweet water” in Hawaiian, has a long history with agriculture. Though exact date of Hawaiian settlement is unclear, evidence of taro *lo`i* and fishing villages are dispersed through the broad valley and wide shoreline. While the lands were used for ranching in the mid 1800s, agricultural activity continued through the plantation era, bringing a water system via sources diverted from Kailua. A large portion of Waimanalo was acquired by the U.S. military in 1917 and is now Bellows Air Force Station. Waimanalo remains a community with a strong agricultural background.

### 2.1 Location

---

Waimanalo is located on the southeastern part of Oahu, Hawaii (**Map 2-1**). It is bordered by Waimanalo Bay and lies within the southeast end of the Koʻolau Range, with Kalanianaʻole Highway as the main thoroughfare connecting Honolulu, Waimanalo, and Kailua. It is part of the Koʻolaupoko District.

Waimanalo Beach Park extends approximately 5.5 miles along the coast. Marine Corps Training Area Bellows is situated adjacent to the park and features several streams, ditches, and wetland areas that provide nesting places for endangered water bird species.

On the *mauka* side, the Waimanalo community sits on the brink of the Waimanalo Forest Reserve, stretching along the foot of the Koʻolau Range up to the ridge. Mt. Olomana and the Olomana Golf Links define one end of the town for a car traveler. The other edges are defined by long stretches of beach and the base of the Koʻolau Ranges.

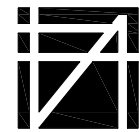
Kailua is the nearest urban settlement to Waimanalo, located approximately 5 miles to the northwest, and Honolulu is about 14 miles to the southwest.

### 2.2 Physical Environment

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#### 2.2.1 Topography

The Koʻolau Ridge overlooks Waimanalo Bay at an elevation of approximately 2,600 feet. Waimanalo sits at the foot of this mountain range, gently sloping towards the bay. Natural valleys, man-made gullies, and an irrigation system developed during the taro and sugar cane periods serve as drainage. Currently, these valleys pose threats of flooding in Waimanalo during heavy rains (**Map 2-2**).

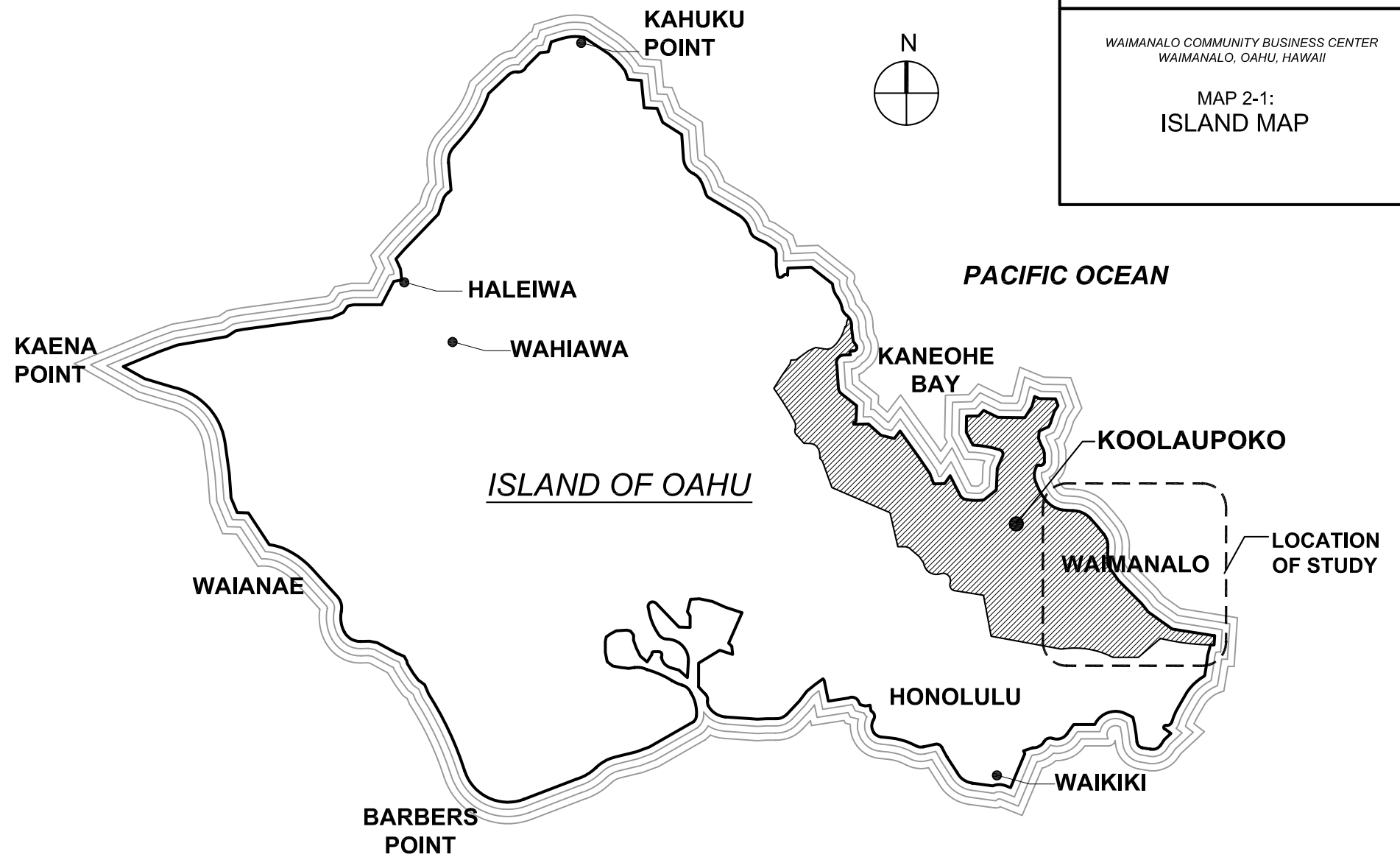


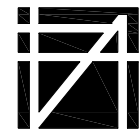
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MAP 2-1:  
ISLAND MAP



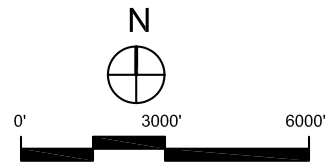


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MAP 2-2:  
TOPOGRAPHY



KAILUA

PACIFIC  
OCEAN

HIHIMANU STREET  
KALANANAOLE HWY

WAIMANALO FOREST  
RESERVE

HONOLULU



### 2.2.2 Climate

The weather conditions in Waimanalo are sustained at comfortable levels except during the summer months when relative humidity is higher than usual, as is common throughout much of Oahu. Average temperature is approximately 75.2°F. Tradewinds from the northeast are the typical wind pattern. Because of dramatic elevation changes, rainfall varies considerably from approximately 40 inches per year at the shoreline to about 100 inches per year in the mountains (**Map 2-3**).

### 2.2.3 Significant Landforms

The concept of *mauka* and *makai* are evident throughout much of the *ahupua`a* of Waimanalo. From the back drop of Mt. Olomana and the Koolaus to Waimanalo Beach Park, Waimanalo features magnificent views of both mountains and the sea. Of special note, Mt. Olomana is famous in Hawaiian legends and a visual landmark for residents and visitors.

Waimanalo Bay consists of 5.5 miles of sandy shoreline, the largest sandy stretch of beach on Oahu, with an exceptionally wide submerged reef offshore.

### 2.2.4 Streams and Wetlands

There are three major streams that drain the Waimanalo Basin. Waimanalo Stream is a perennial stream and is connected to two irrigation reservoirs, the Kailua and Maunawili reservoirs. Inoaole Stream and Muliwaiolena Stream are intermittent. None of the rivers hold the federal management designation of wild, scenic, or recreational rivers.

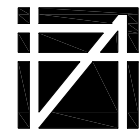
Within Waimanalo there are several wetland areas, including numerous areas in Bellows. Some of these areas provide a habitat for endangered water bird species, while others are used as reservoirs to hold irrigation water from the Waimanalo Ditch system (**Map 2-4**). Water run-off, flooding, and erosion from the former watershed raise concerns for the pollution of Waimanalo shores and beaches.

### 2.2.5 Natural Hazards

Floods occur in portions of Waimanalo during severe rainstorms. This has been primarily attributed to high rainfall in the steep Koolaus, low-lying coastal plains, poor condition of the plantation-era reservoirs, and low carrying capacity of the streams and ditch system that drain rainfall to the ocean (**Map 2-5**). The 100-year flood zone has a 1% or greater potential to experience flood levels in any given year. Areas in the 500-year flood plain are termed “moderate flood hazard areas.” The floodways include areas that should remain unobstructed to allow flood waters to discharge without raising base flood elevations by more than one foot.

Much of the low lying areas of Waimanalo fall in the tsunami inundation zone and may be susceptible to tsunami damage (**Map 2-5**). Inundations in Waimanalo during major tsunamis have occurred in 1946, 1952, and 1960, although there were no reports of property damage. The fringe reef helps to dissipate high waves, but the threat of tsunami inundation increases toward Makapuu Beach Park.



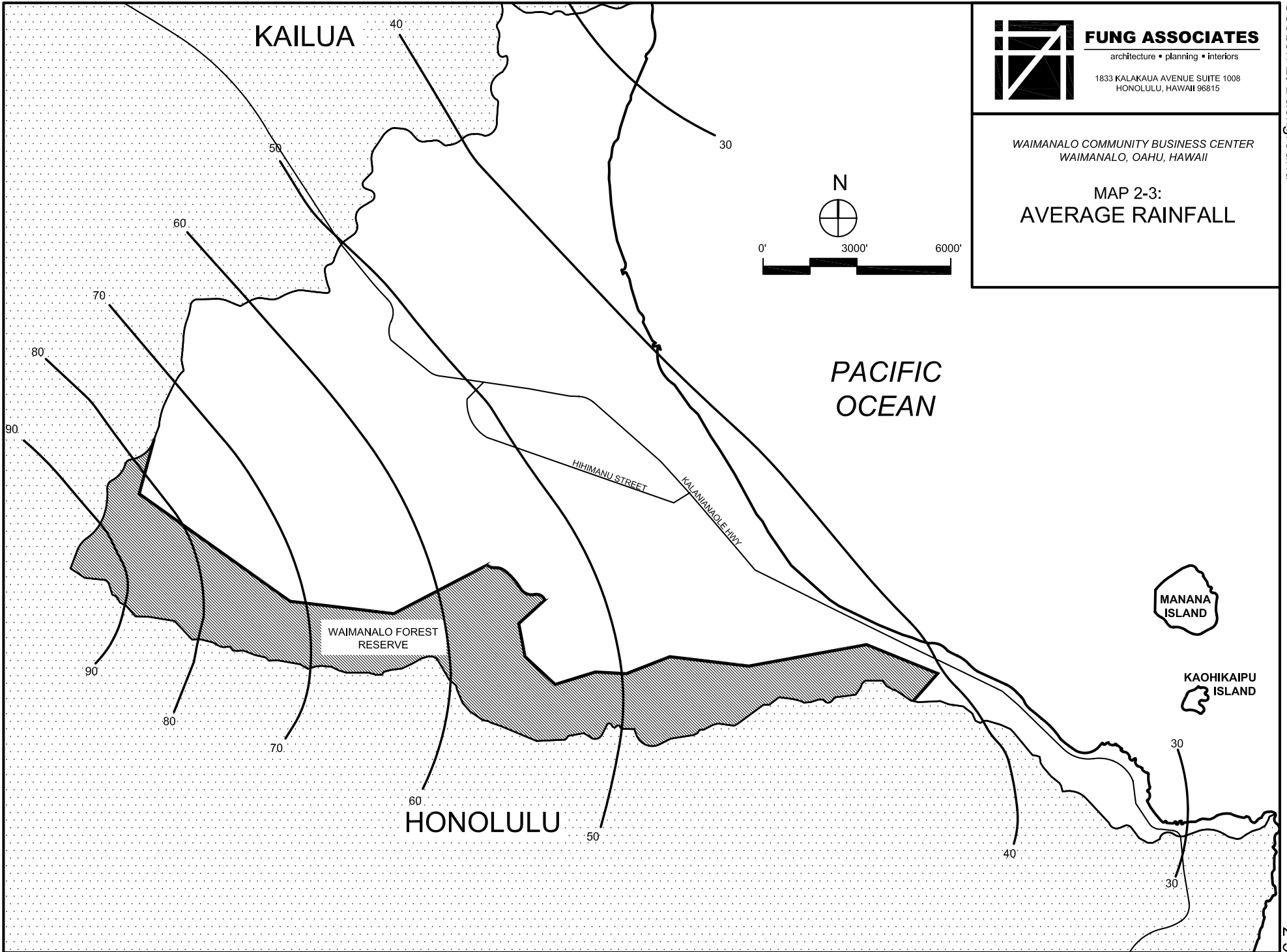


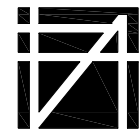
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MAP 2-3:  
AVERAGE RAINFALL








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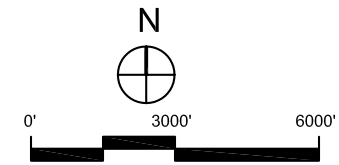
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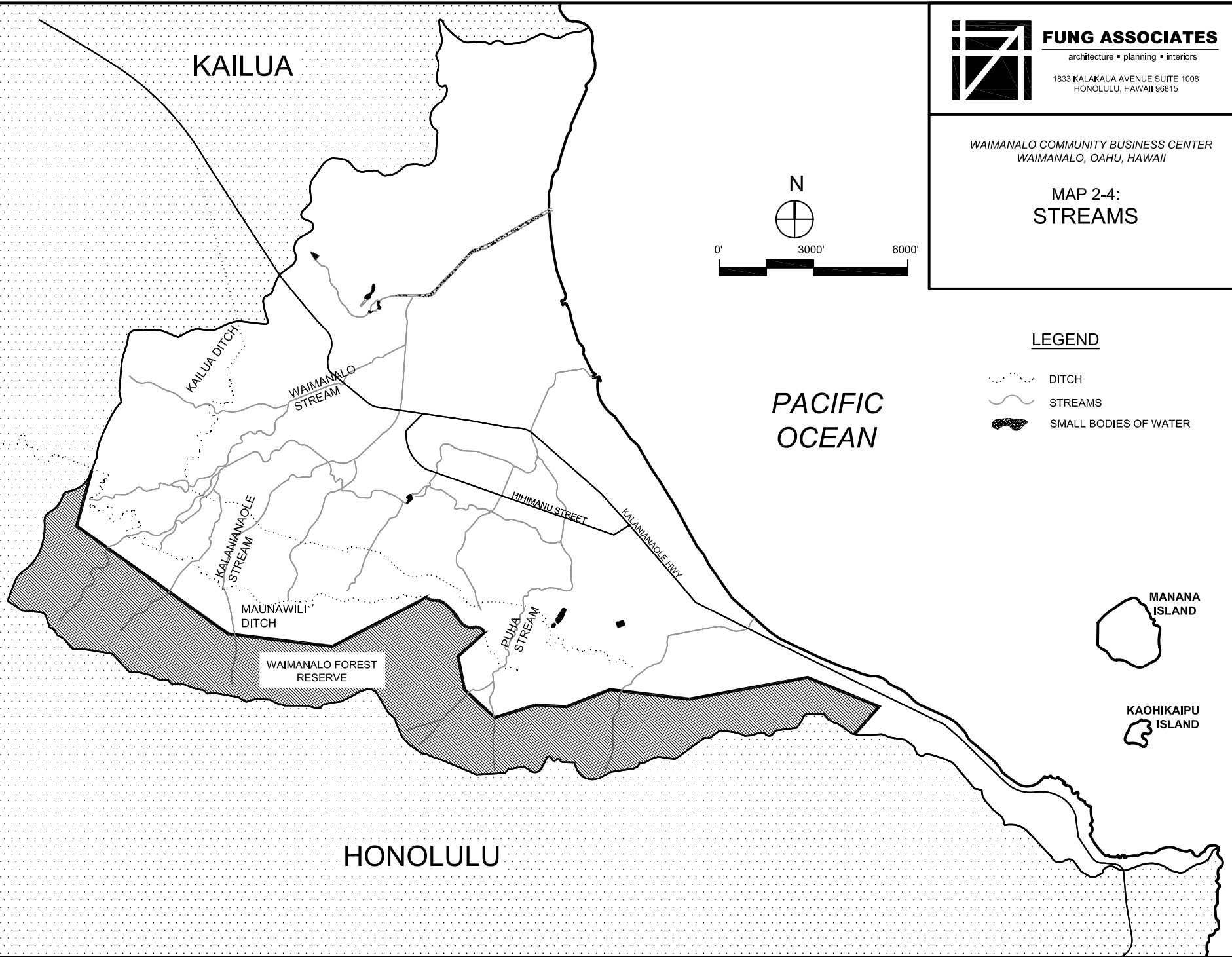
MAP 2-4:  
STREAMS

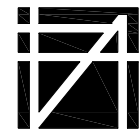
LEGEND

-  DITCH
-  STREAMS
-  SMALL BODIES OF WATER



PACIFIC  
OCEAN










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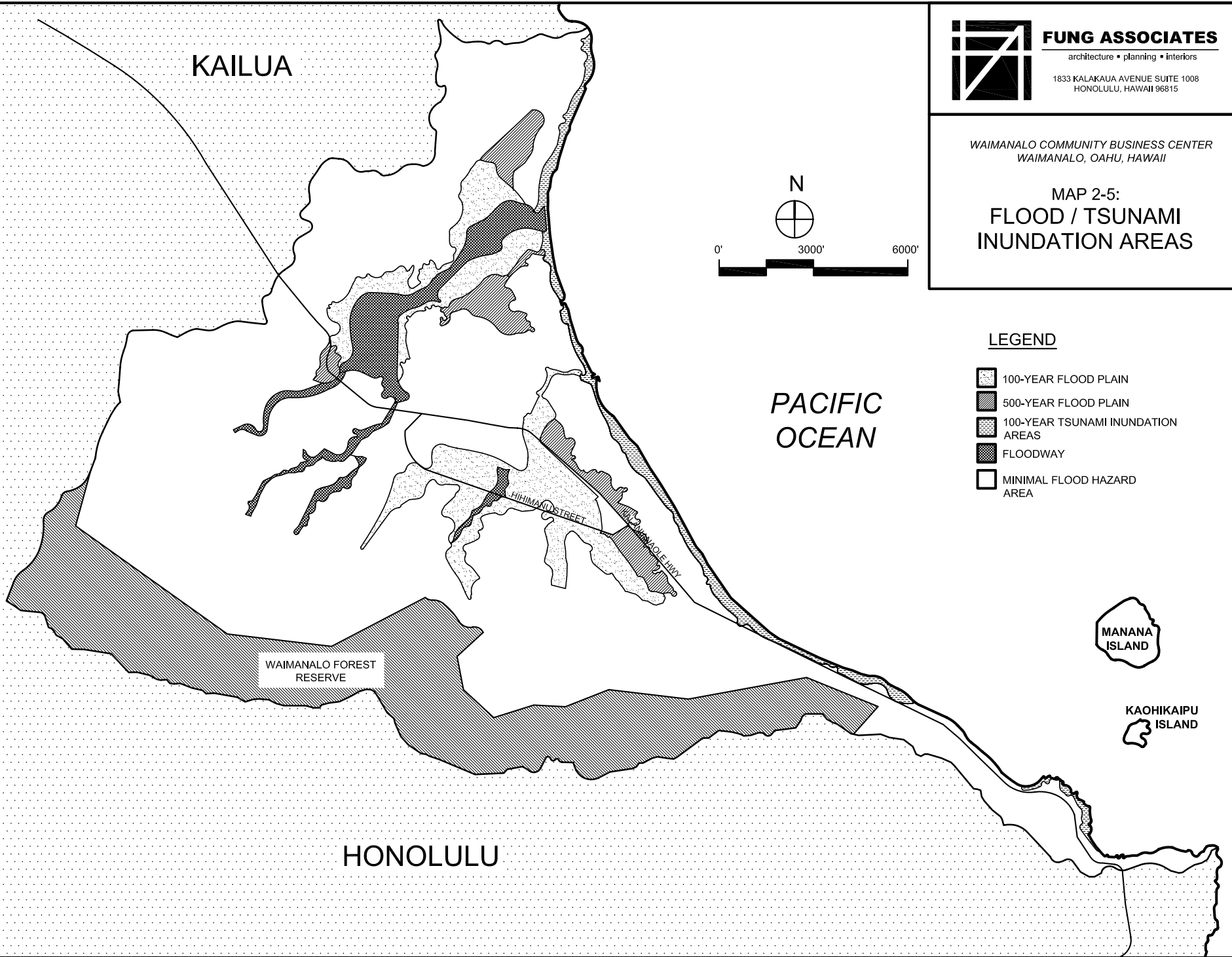
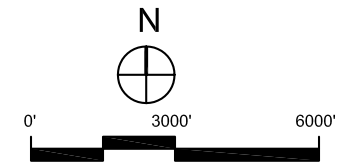
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MAP 2-5:  
FLOOD / TSUNAMI  
INUNDATION AREAS

LEGEND

-  100-YEAR FLOOD PLAIN
-  500-YEAR FLOOD PLAIN
-  100-YEAR TSUNAMI INUNDATION AREAS
-  FLOODWAY
-  MINIMAL FLOOD HAZARD AREA



Though there has not been any reported damage from seismic activity, the area is ranked moderately high for volcanic/seismic hazard because of its proximity to the Molokai Seismic Zone.

### *2.2.6 Context*

Waimanalo is composed of mostly agricultural lots with vast open green spaces. Green areas include farms, ranches, nurseries, and areas designated as conservation and/or preservation such as the Waimanalo Forest Reserve. Homestead lots and residential neighborhoods are clustered. Most residential structures are single-story wooden structures with a gable or hip roof and are typically raised above ground. Scattered among the newer homes are remnants of the plantation era camp structures. Residential structures on the ocean side of the highway features a mix of affluent households and beach cabins. Included on the makai side of Kalanianaʻole Highway is the house where “Magnum, P.I.” was filmed.

## **2.3 Public Land Use Policy**

---

Historically, Waimanalo was part of the Koʻolaupoko watershed, now known as the Koʻolaupoko District that includes Kahuku, Kaaawa, Waiahole, Kahaluu, Kaneohe, Kailua, and Waimanalo. Remaining vestiges of the water system that was used for the irrigation of taro fields and as the water source for the livelihood of the communities, and later used as the irrigation system for sugarcane fields that diverted water from Kailua to Waimanalo, sometimes pose a problem of flooding and ecological degradation in the form of channeled erosion. Also, the old plantation reservoirs have overflowed and filled neighboring yards with debris. In serving as the "Watershed Advisory Group" specified by the U.S. Environmental Protection Agency's Unified Watershed Effort, a local community grass roots organization, Waimanalo Ahupuaʻa Watershed Council, has examined the issue of flooding caused by the irrigation water system and reservoirs. The Council is currently involved in the production of “Waimanalo's Watershed Restoration Action Plan and Watershed Action Strategy” to help correct the flooding problems.

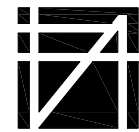
### *2.3.1 Federal Land Use*

Currently, Waimanalo incorporates the Marine Corps Training Area Bellows, also called the Bellows Air Force Station. The majority of the station is used for Marine training. A portion is designated for public use for beach, picnicking, and camping on weekends. Presently, part of the federal installation is in the process of being turned over to the State of Hawaii as part of the federally generated Base Realignment and Closure (BRAC) process.

### *2.3.2 State Land Use*

#### **A. Land Use Districts**

Adopted by the State Legislature in 1961, the State Land Use Law established four broad land use districts to administer development (**Map 2-6**). The four major districts are Urban, Rural,






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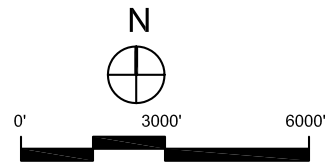
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MAP 2-6:  
STATE LAND USE

LEGEND

-  URBAN
-  AGRICULTURAL
-  CONSERVATION



PACIFIC  
OCEAN



KAILUA

HONOLULU

HIHIMANU STREET

WILANIANOLE HWY

Agricultural, and Conservation. Land uses within these districts are generally described and administered as follows:

- Urban Districts – generally characterized by residential neighborhoods, commerce, and community facilities including public buildings – by the respective county zoning code.
- Conservation – primarily consisting of existing forest and water reserve areas – by the State Department of Land and Natural Resources.
- Agricultural and Rural – generally characterized by greater open land for agricultural purposes – shared between the respective county zoning code and the State via Chapter 205 HRS. There are no Rural Land Use Districts in the City and County of Honolulu.

The majority of developable land within the Waimanalo area is designated Urban and Agricultural. The Conservation District is comprised primarily of the Koolau Mountain Range and the forest reserve on its slopes. The proposed WCBC is a permitted use within the Urban District, but not in the Agricultural and Conservation Districts. Should the proposal be sought within the Agricultural District, the project would be subject to a land use district boundary amendment or a special use permit.

A land use district boundary amendment or a special use permit, however, is not applicable within the 126 acres of Waimanalo Agricultural Park, which is specifically set aside by the State for agricultural activities only and therefore cannot be considered for a community business center. A land use district boundary amendment or a Conservation District Use Permit will be required if the proposal is sought within the Conservation District. Considerations for a boundary amendment will require an environmental assessment and submittal and approval by the Land Use Commission which may be an arduous process.

#### B. Department of Hawaiian Homelands (DHHL)

Much of the land in Waimanalo is under the jurisdiction of DHHL, which is mandated to provide homes for people of Hawaiian ancestry. Some of the land can be used for commercial purposes to financially support the development of houses or for other community developments which benefit people of Hawaiian ancestry. To assist in expediting its mandate, the DHHL may exempt its projects from State and County land use regulations.

#### C. Agricultural Lands of Importance to the State of Hawaii

Agricultural lands are classified according to the Agricultural Lands of Importance to the State of Hawaii (ALISH) system. The intent of this State classification system is to provide a guideline for decision makers to use in agricultural preservation, planning, and development. There are three classifications:

- Prime – land best suited for the production of food, feed, forage and fiber crops.
- Unique – land used for the production of specific high-value food crops such as coffee, taro, rice, watercress, and non-irrigated pineapple.

- Other Important agricultural lands – land that is important for food, feed, forage and fiber, but does not qualify as “Prime” or “Unique” due to certain physical constraints. Much of Waimanalo consists of Prime Agricultural land and “Other Important Agricultural Land.” There are no “Unique Agricultural Lands” in Waimanalo (**Map 2-7**).

### 2.3.3 City Land Use

#### A. Oahu General Plan

The Oahu General Plan establishes a set of broad, long range planning guidelines for the City and County of Honolulu. The General Plan provides guidelines in the areas of population, economic activity, natural environment, housing, transportation and utilities, energy, physical development and urban design, public safety, health and education, culture and recreation, and government operations and fiscal management. With respect to population and future growth, the windward region of Oahu is not intended for further significant growth and urbanization as compared with the Primary Urban Center and `Ewa which are designated for further infill and urban expansion.

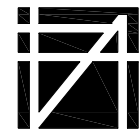
#### B. The Koolau-poko Sustainable Communities Plan

The City and County of Honolulu established eight development plan areas to implement the guidelines and objectives of the General Plan. Waimanalo and the surrounding region fall under the development plan referred to as the *Koolau-poko Sustainable Communities Plan*. Projecting essentially no population growth until the year 2020, the plan was developed with the vision that calls for the protection of the communities’ natural, scenic, cultural, historic, and agricultural resources, and the need to improve and replace the region’s aging infrastructure systems. The ten basic tenets of the Koolau-poko Sustainable Communities Plan are:

- Adapt the concept of *ahupua`a* as a basis for land use and natural resources management.
- Preserve and promote open space throughout the region.
- Preserve and promote agricultural uses.
- Preserve and enhance scenic, recreational, and cultural features that define Koolau-poko’s sense of place.
- Emphasize alternatives to the private passenger vehicle as modes for travel.
- Adapt housing and public works standards to community character and altering needs.
- Protect residential neighborhoods.
- Define and enhance existing commercial and civic districts.
- Establish Urban Community, Rural Community, Agriculture, and Preservation boundaries (**Map 2-8**).
- Maintain the predominantly low-rise, low-density, and single-family character of the urban fringe and rural communities.

The project aims to fit the plan by:

- Taking inappropriate activities and equipment out of the agricultural areas and thus





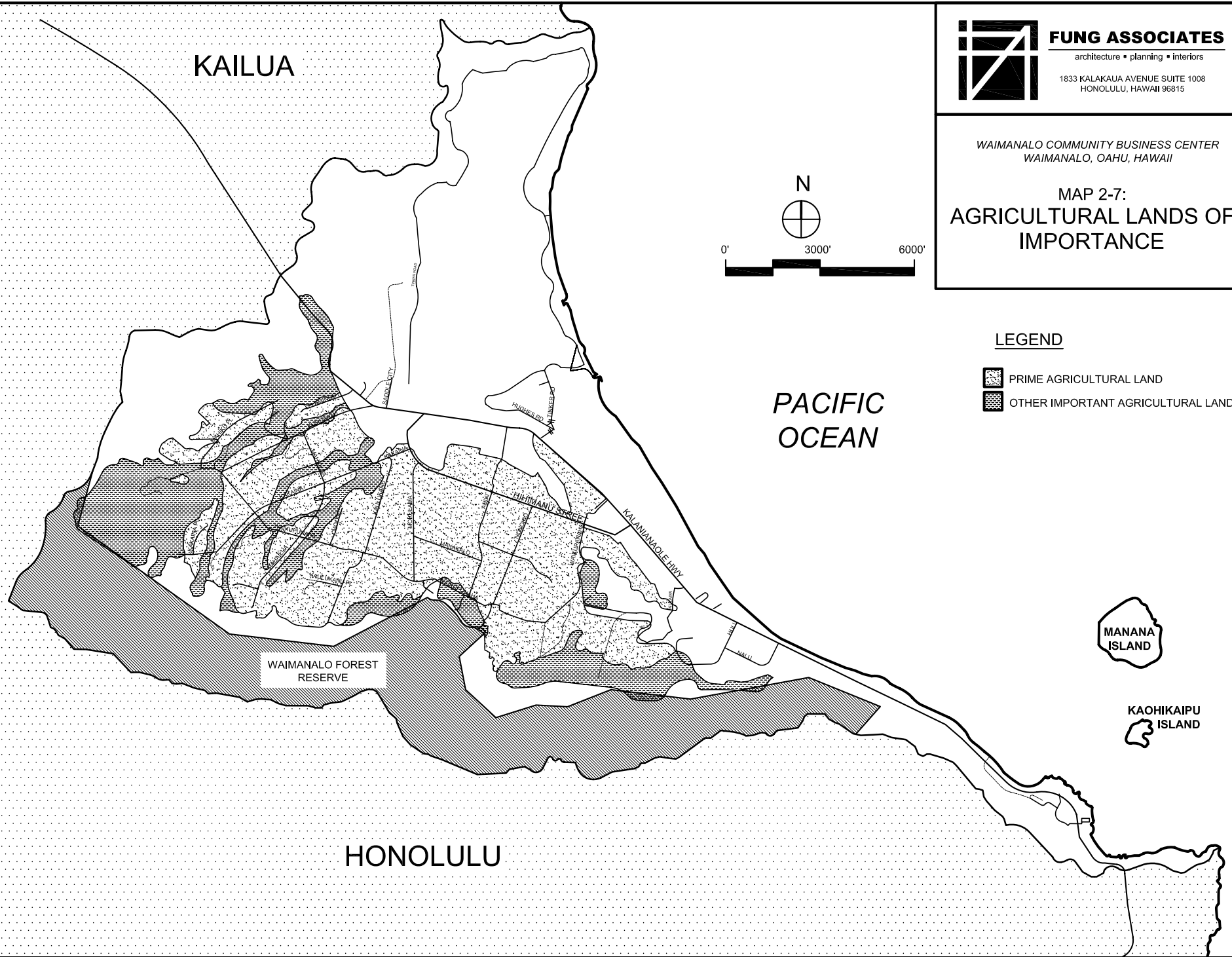
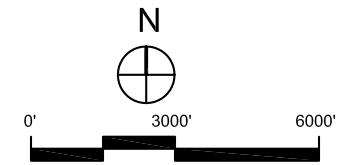
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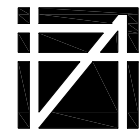
MAP 2-7:  
AGRICULTURAL LANDS OF  
IMPORTANCE

LEGEND

-  PRIME AGRICULTURAL LAND
-  OTHER IMPORTANT AGRICULTURAL LAND



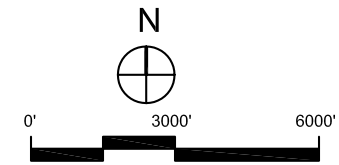




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MAP 2-8:  
**KOOLAUPOKO  
DEVELOPMENT PLAN**



LEGEND

-  PRESERVATION
-  RESIDENTIAL
-  MILITARY
-  PARKS AND RECREATION
-  COMMERCIAL
-  AGRICULTURE
-  INDUSTRIAL

PACIFIC  
OCEAN

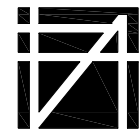


KAILUA

HONOLULU

HIHIMANU STREET

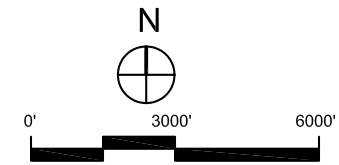
KALANANAKOULE HIGH















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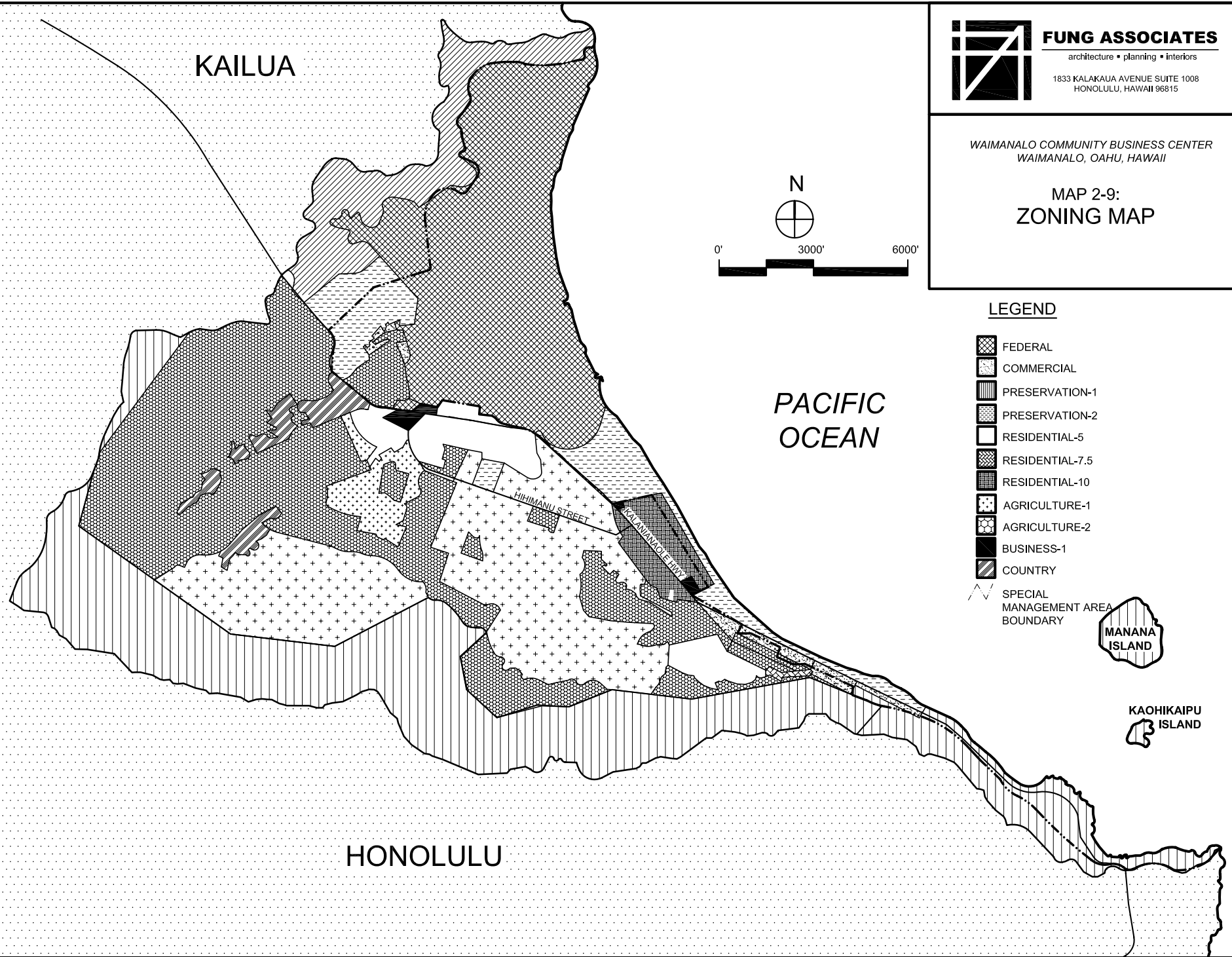
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WAIMANALO, OAHU, HAWAII

MAP 2-9:  
ZONING MAP



LEGEND

-  FEDERAL
-  COMMERCIAL
-  PRESERVATION-1
-  PRESERVATION-2
-  RESIDENTIAL-5
-  RESIDENTIAL-7.5
-  RESIDENTIAL-10
-  AGRICULTURE-1
-  AGRICULTURE-2
-  BUSINESS-1
-  COUNTRY
-  SPECIAL MANAGEMENT AREA BOUNDARY



preserving and promoting agriculture and open space.

- Avoiding the reduction of any park space or lands currently used for agriculture.
- Locating work and training facilities within Waimanalo to decrease the reliance on the automobile and traveling outside of Waimanalo for education and work.
- Developing buildings that fit into the character of Waimanalo.

#### C. Zoning

Not including the Federal lands, the City and County of Honolulu classified approximately 85% of the district as agricultural and about 10% for residential. Conservation lands define the periphery of the District. There are two small nodes of commercial zone classification along Kalanianaʻole Highway within Waimanalo. A few lots were proposed for re-zoning but have not been finalized yet (**Map 2-9**).

#### D. Special Management Area (SMA)

The Special Management Area, Chapter 25 of the Revised Ordinances of Honolulu, was established to preserve, protect, and restore the natural resources of the coastal zone of Hawaii. No development can occur in the SMA unless proper permits are issued. The SMA covers the majority of the land in Waimanalo *makai* of Kalanianaʻole Highway (**Map 2-9**).

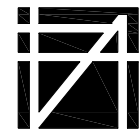
#### 2.3.4 Land Ownership

Land ownership generally falls under four categories: Federal, State, County and private. In Waimanalo, the largest land owner is the State (**Map 2-10**). Much of the State-owned land is under the jurisdiction of the Department of Hawaiian Homelands. Some are empty lots while others have been developed for commercial use and housing needs. People with Native Hawaiian lineage have priority for utilization of these lands. Most of the State-owned lands under the jurisdiction of the Department of Land and Natural Resources have been leased for agricultural use. A significant portion of land in Waimanalo is Federal lands operated by the Air Force. Private lots are generally used for commercial, residential, or agricultural purposes.

### 2.4 Cultural Attributes

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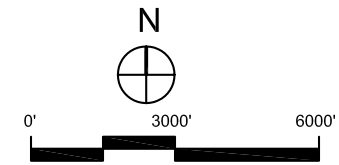
Cultural attributes refer to physical evidence of elements that hold historical or cultural significance to the people of Hawaii. Historic significance is defined by the National Register Program as “the importance of a property to the history, architecture, archeology, engineering, or culture of a community, State, or the nation.” Under Federal and State regulations, these elements may be eligible for listing on the Hawaii and National Registers of Historic Places and thus may require abiding by special regulations set forth by Section 106 of the National Historic Preservation Act and/or Chapter 6E of the Hawaii Revised Statutes.








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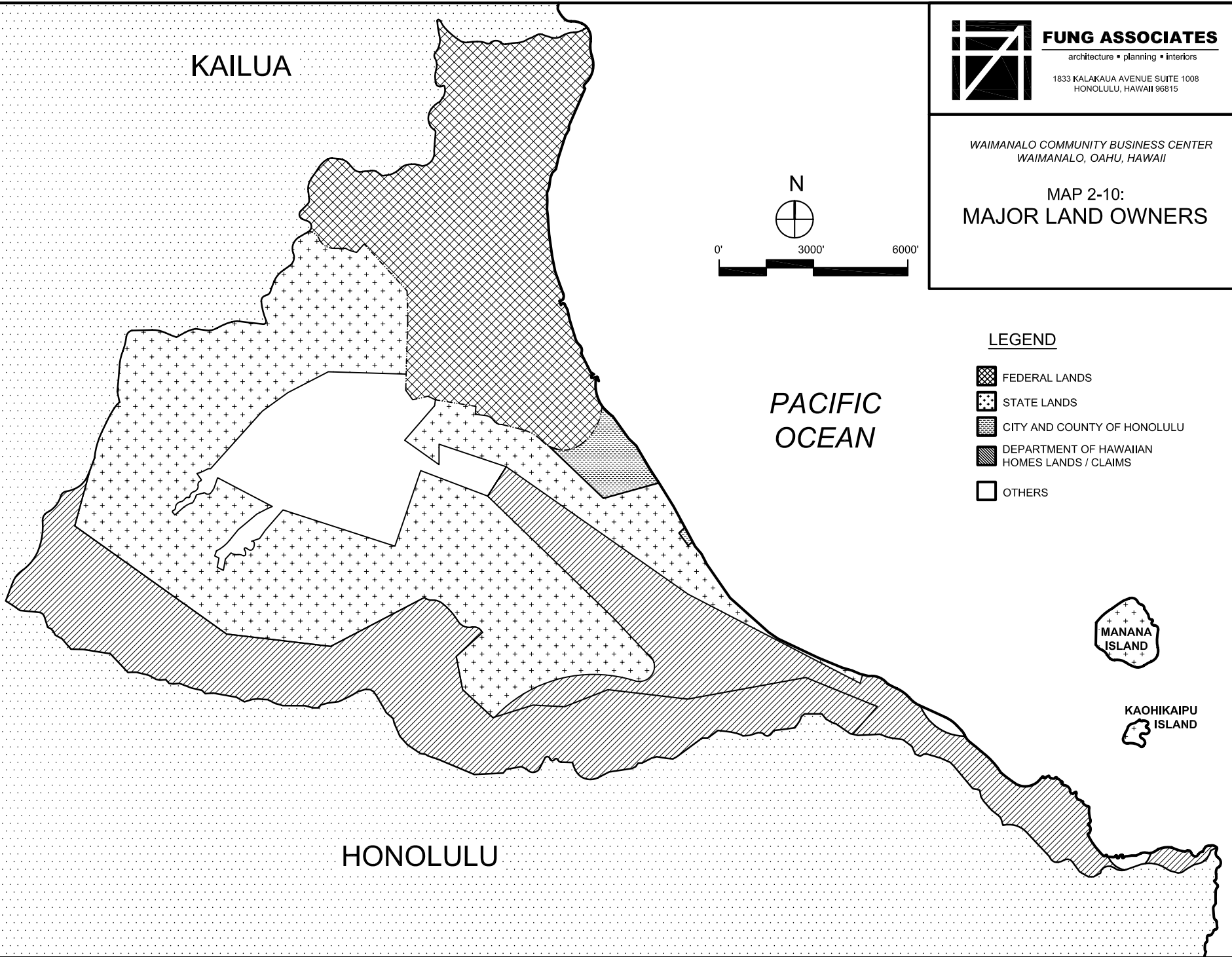
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WAIMANALO, OAHU, HAWAII

MAP 2-10:  
MAJOR LAND OWNERS



LEGEND

-  FEDERAL LANDS
-  STATE LANDS
-  CITY AND COUNTY OF HONOLULU
-  DEPARTMENT OF HAWAIIAN HOMES LANDS / CLAIMS
-  OTHERS



### 2.4.1 Historic Sites

Historic sites are defined for this study specifically as properties within the Waimanalo area eligible for listing on the National Register of Historic Places (**Map 2-11**). Currently the following are listed:

- Pohakunui Heiau located off of Mahailua Street – Hawaii Register 9/5/78.
- Manana Island or Rabbit Island off north of Makapu‘u Point – Hawaii Register 1/29/81.
- Waimanalo Taro Terraces which sits along the border of the designated Waimanalo Forest Reserve – Hawaii Register 6/17/87.
- Pahonu Turtle Pond sitting on the southern tip of Waimanalo bordered by the ocean and Kalanianaʻole Highway – Hawaii Register 9/2/78.
- Waimanalo Ditch System which runs along the foot of the Koʻolau Mountains and edge of the forest reserve, Portions of 4-1 – Determined Eligible 9/18/81.
- Heiau (unnamed) which fronts the forest reserve – Hawaii Register 1/29/81.
- Bellows Field Archaeological Area. These sites contain ditches, streams, and wetland areas – National Register 8/14/73.

Other sites that are noted in the Inventory of Historic Places at the Hawaii State Historic Preservation Division (SHPD) and are most likely eligible for listing include St. George Church. There may be other properties eligible for listing, such as the remaining plantation houses, that are currently not identified in the database at the SHPD office. Also, there are numerous occasions when an archaeological site is not known until findings of artifacts or *iwi* are unearthed during grading or construction. Previously developed areas are less likely to encounter these inadvertent discoveries.

## 2.5 Infrastructure

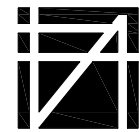
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### 2.5.1 Transportation

Kalanianaʻole Highway is the main thoroughfare into Waimanalo from Honolulu and from Kailua. Compositions of smaller roads, typically two lanes, make up the local routes to and from properties in Waimanalo. Hihimanu Street, branching from the Kalanianaʻole Highway at both ends, is the main local access. It runs almost parallel to Kalanianaʻole Highway.

There are designations of bike paths, routes, and lanes for bike riders in Waimanalo. Sidewalks are narrow or non-existent in the residential areas with encroachments to the road by residential, utilities, and light piles. Bigger trucks, which are used primarily for loading construction materials, are often parked along the residential streets.

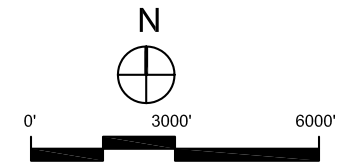
Private automobile and the public transit system are the main transportation for residences. TheBus system runs along Kalanianaʻole Highway and goes into a few residential areas (**Map 2-12**). Rush hour traffic slows weekday traffic and weekends can bring a traffic jam near the beaches.



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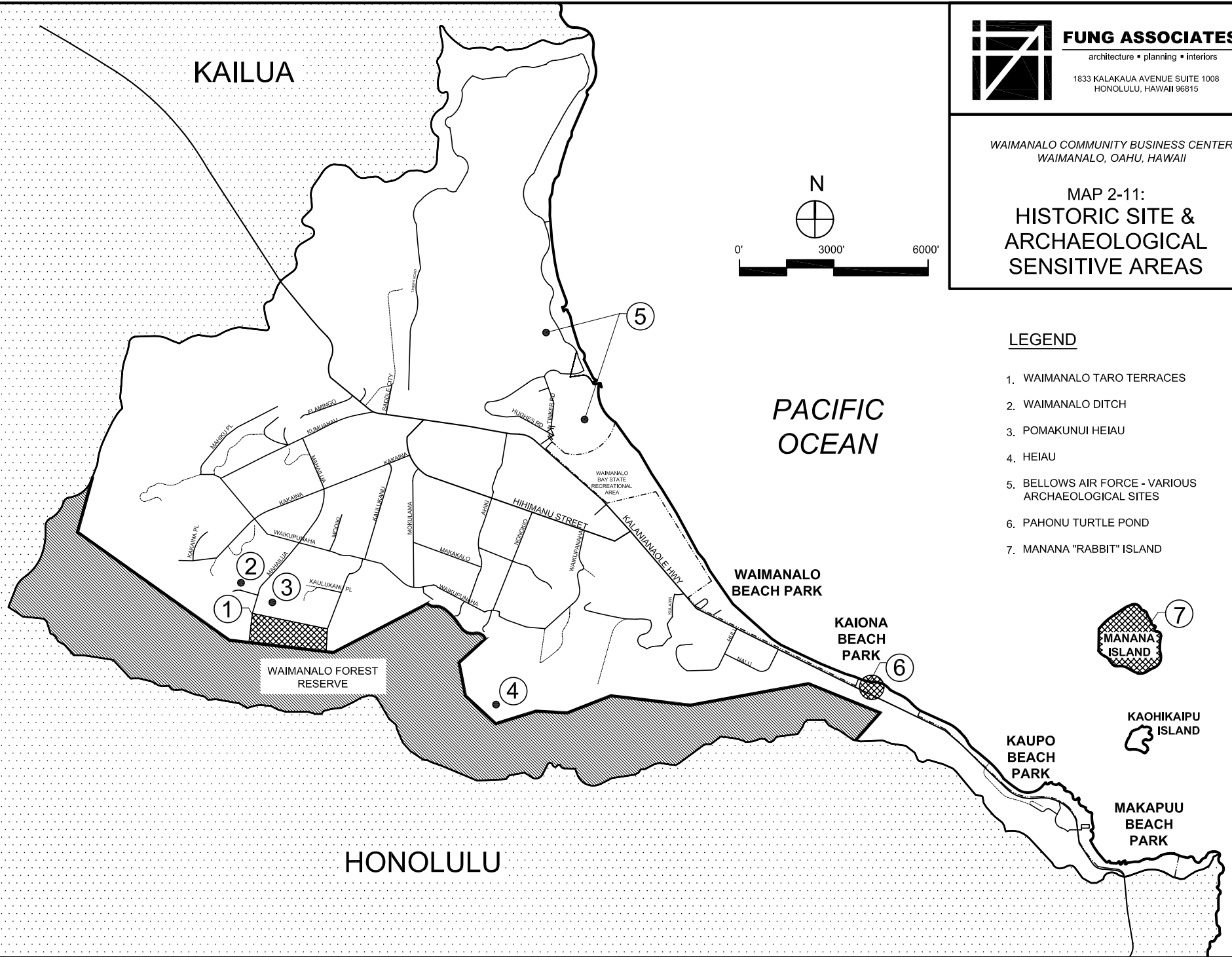
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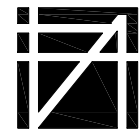
MAP 2-11:  
HISTORIC SITE &  
ARCHAEOLOGICAL  
SENSITIVE AREAS



LEGEND

- 1. WAIMANALO TARO TERRACES
- 2. WAIMANALO DITCH
- 3. POMAKUNUI HEIAU
- 4. HEIAU
- 5. BELLOWS AIR FORCE - VARIOUS  
ARCHAEOLOGICAL SITES
- 6. PAHONU TURTLE POND
- 7. MANANA "RABBIT" ISLAND

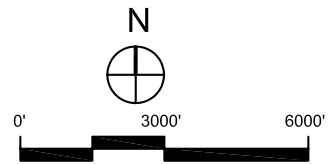




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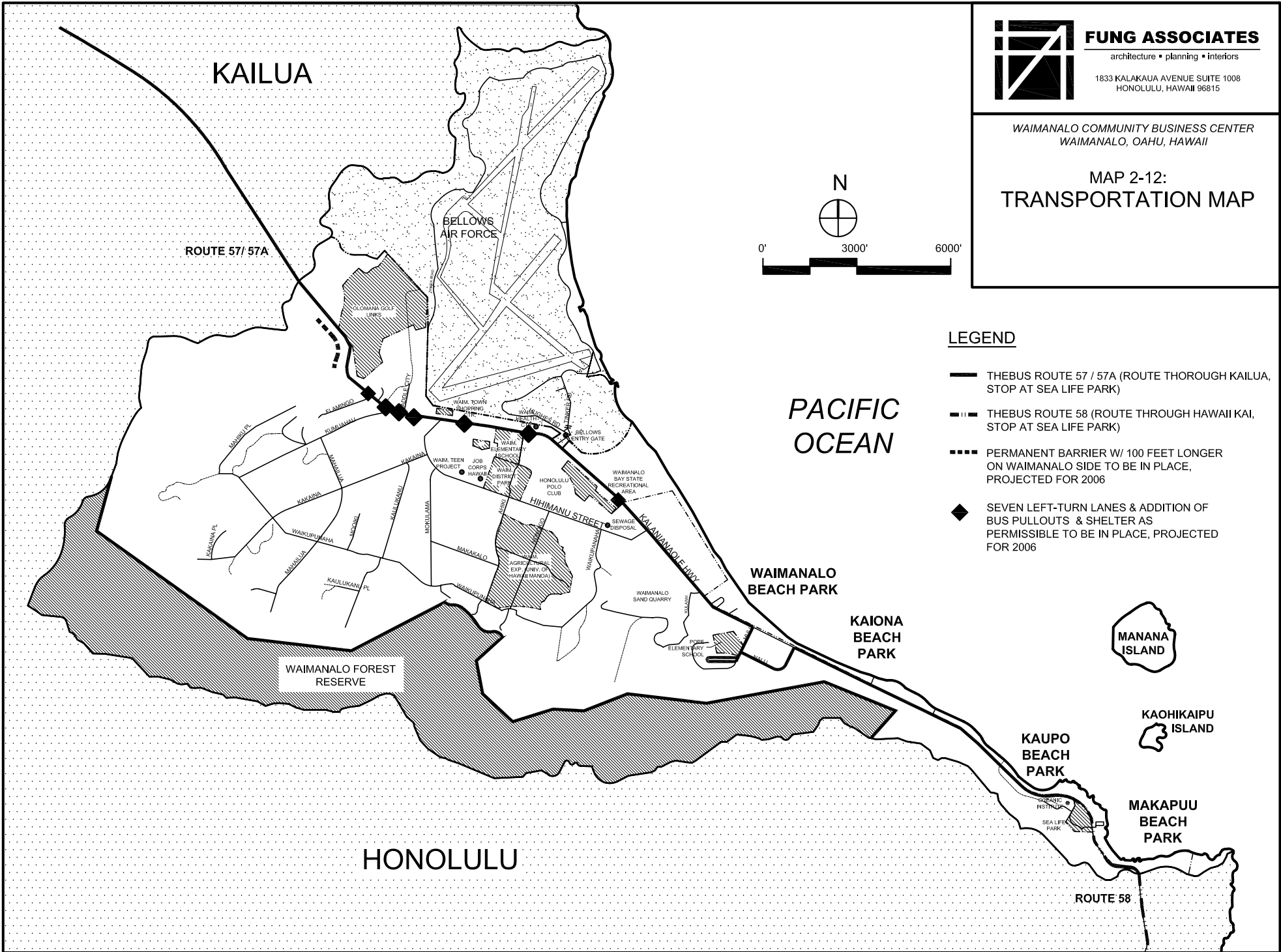
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MAP 2-12:  
TRANSPORTATION MAP



LEGEND

- THEBUS ROUTE 57 / 57A (ROUTE THOROUGH KAILUA, STOP AT SEA LIFE PARK)
- THEBUS ROUTE 58 (ROUTE THROUGH HAWAII KAI, STOP AT SEA LIFE PARK)
- PERMANENT BARRIER W/ 100 FEET LONGER ON WAIMANALO SIDE TO BE IN PLACE, PROJECTED FOR 2006
- SEVEN LEFT-TURN LANES & ADDITION OF BUS PULLOUTS & SHELTER AS PERMISSIBLE TO BE IN PLACE, PROJECTED FOR 2006



The State Department of Transportation recently announced plans to begin construction in 2006 on installing bus pull outs and left turn lanes along Kalanianaʻole Highway. Also, a permanent barrier between the incoming and outgoing traffic near Olomana Golf Links and a grass median in front of Waimanalo Elementary School are planned (**Map 2-12**).

### 2.5.2 Water

Municipal potable water is supplied by the Board of Water Supply. Reservoirs are along the foothills of the Koolaus on higher grounds and gravity fed to the valley. The construction of a new well and 20,000-gallon tank is proposed near the former Meadow Gold Dairy. The capacity along the main roads poses no problem to development. However, while numerous mains and water pipes service Waimanalo near Hihimanu Street and Kalanianaʻole Highway, areas close to the mountains have not been developed by the Board of Water Supply.

Generally, the dike confined aquifers in the Koolau basalt are located in the upland areas and water levels are tens to hundreds of feet below ground surface. However, in the northern end near Frankie's Nursery there are springs, and the area around the old quarry has water levels close to ground surface. This is an indication that the water level is fairly close to the surface in the plains.

The Underground Injection Control (UIC) was established by Chapter 340E, Hawaii Revised Statutes, to protect the quality of the state's underground sources of drinking water from pollution by subsurface disposal of fluids. The Board of Water Supply pass/no pass line was designated to prevent cesspools and landfills from contaminating potable ground water (**Map 2-13**). No cesspools can be developed in the no-pass zone. The UIC differs in that feasibility of deep injection was addressed.

Non-potable water for irrigation comes from the Maunawili Ditch, a system of tunnels, springs, and streams built by the sugar cane companies that once thrived in Waimanalo. What was once a system to help the agricultural endeavors in the 1920s and 1930s has now become features that direct rain water into the plains, often bring flooding to the farmlands.

### 2.5.3 Wastewater

The Waimanalo Wastewater Service Area is served by a centralized wastewater collection, treatment, and disposal system in over half the residences in Waimanalo. The main sewer lines run along Kalanianaʻole Highway. Wastewater is collected by a network of gravity sewers and then treated at the Waimanalo Wastewater Treatment Plant; the plant is located on Hihimanu Street and is scheduled for improvement to enhance its capacity.

Residents that are not connected to the public sewer are served by individual wastewater systems which include cesspools and septic tanks with leaching fields. However, cesspool or any individual underground injection system is not allowed in many areas of Waimanalo. The 2004 legislature has approved an appropriation to upgrade the outdated wastewater treatment plant with completion scheduled for 2006.



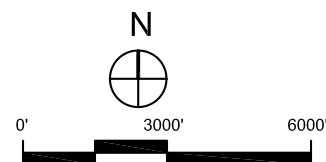


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MAP 2-13:  
BOARD OF WATER SUPPLY  
NO PASS LINE FOR CESSPOOLS



## LEGEND

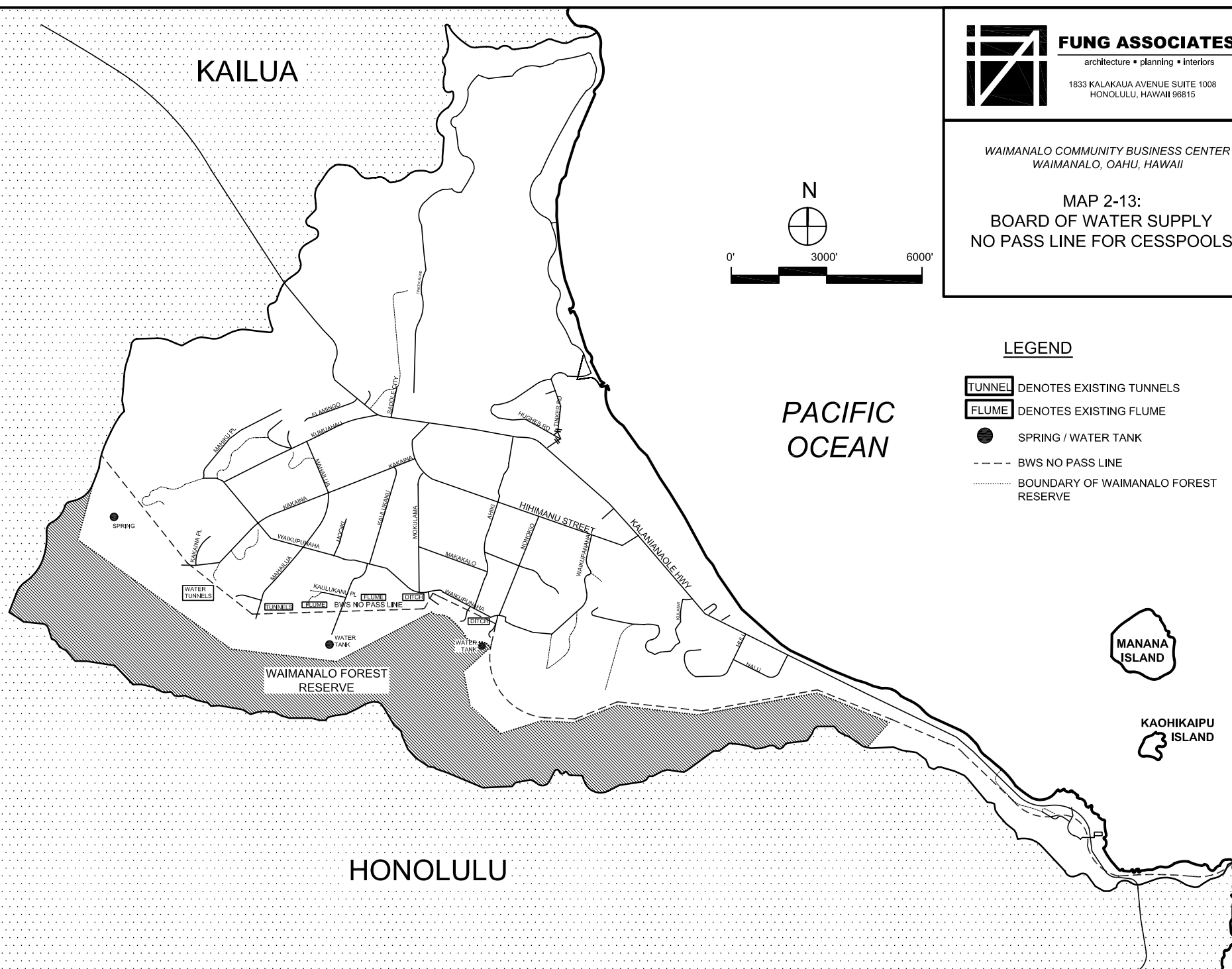
**TUNNEL** DENOTES EXISTING TUNNELS

**FLUME** DENOTES EXISTING FLUME


**SPRING / WATER TANK**

----- BWS NO PASS LINE

..... BOUNDARY OF WAIMANALO FOREST  
RESERVE



The completion of an upgraded wastewater plant will lift a 10-year building moratorium in the area. Without the wastewater plant, the business center would need to provide a self-contained system to dispose of its waste.

#### *2.5.4 Solid Waste*

A refuse center is located on Hihimanu Street not too far from the wastewater collection. It takes in small household appliances and other items.

#### *2.5.5 Electricity*

Hawaiian Electric Company is the main source for electricity in the area. Power is provided to the community via overhead lines.

### **2.6 Socio Economics**

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#### *2.6.1 The Population*

According to the 2000 Census, in early 2000 there were approximately 10,161 people populating Waimanalo, with approximately 67% of the population being full or part Native Hawaiian. About 80% of the population in Waimanalo attained a high school diploma or equivalent. Approximately 81% of the population is in the workforce earning an average household income of \$ 51,687.50, and 8.6% of the population falls below the poverty level. While census information indicates a fairly high household income, the presence of affluent beach front property owners and multi-family dwellings, suggests a lower average income for the project area. Per capita earnings in Waimanalo are fairly low: \$19,257 compared to \$24,227 for Hawaii in general (United States Census 2000: Demographic Profiles).

#### *2.6.2 The Setting*

The town is divided into different areas: farms, nurseries, beach lots, Federal lots, town (which consists of private housing and businesses), and Hawaiian Homestead development. Overall, Waimanalo is a self-sustaining agricultural community with limited commercial activities. Agricultural activities include farming of various produces, nurseries, and domesticated animals. Settings in the agriculture domain also include ranches. Two prominent nodes of commercial centers in Waimanalo run along Kalanianaʻole Highway (**Map 2-9**).

### **2.7 Public Services**

---

Public service facilities are primarily located on the spine of Waimanalo (**Map 2-14**). The Post Office is located along Kalanianaʻole Highway, and the fire station is located adjacent to the Health Center. There are no police substations or hospitals in this suburban area. The closest hospital is Castle Medical Center, approximately 5 miles away from the community. The nearest police substations are located in Kailua and in Kaneohe. However, there is a Windward Neighborhood Watch Group.



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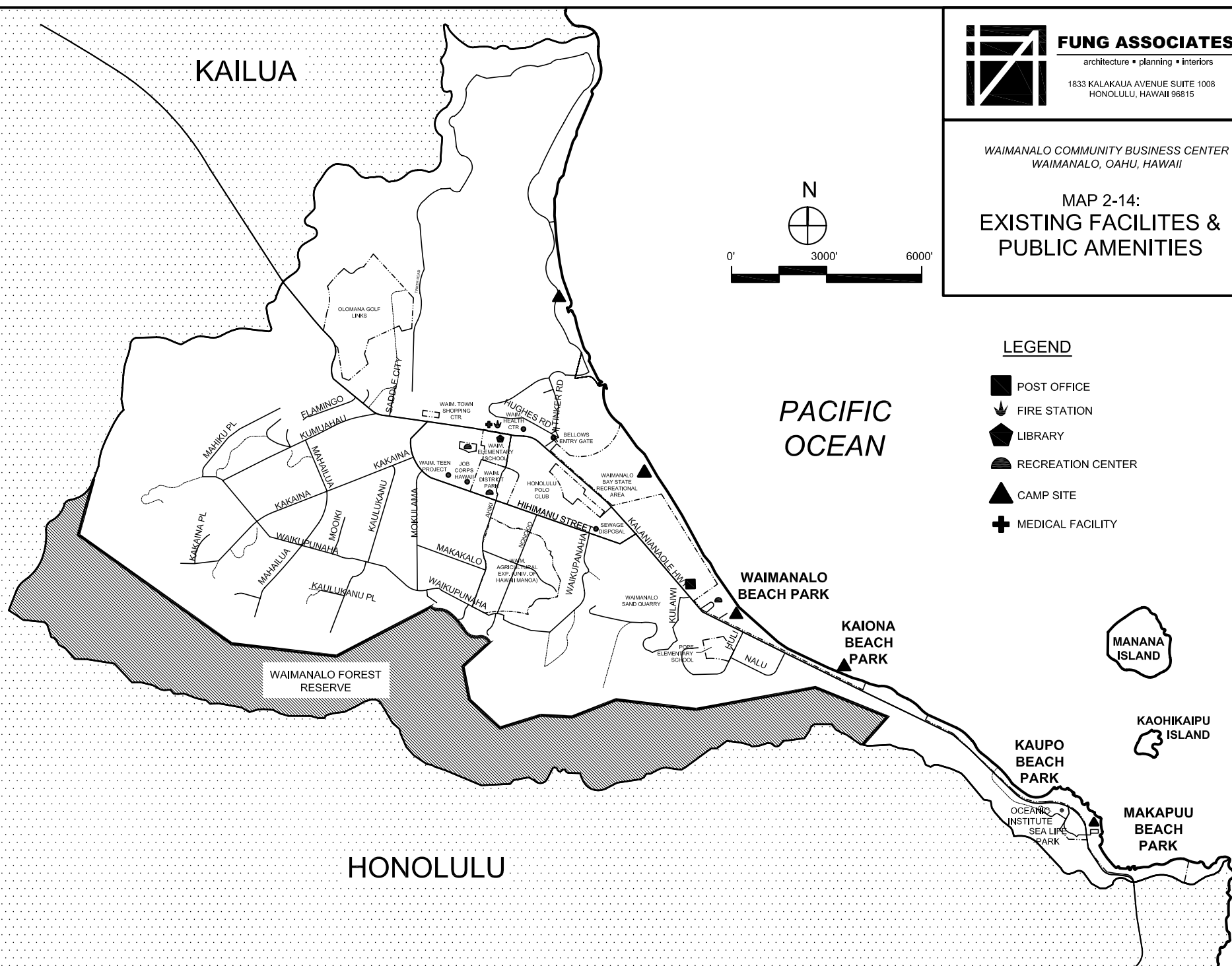
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MAP 2-14:  
EXISTING FACILITIES &  
PUBLIC AMENITIES

### LEGEND

-  POST OFFICE
-  FIRE STATION
-  LIBRARY
-  RECREATION CENTER
-  CAMP SITE
-  MEDICAL FACILITY



### *2.7.1 Waimanalo Health Center*

The Waimanalo Health Center is a non-profit organization that services the entire windward coast of Oahu. This center is active in social and health issues in the community. Services include social services, pediatric care, family practice, an adult clinic, and a women's clinic. They are located along Kalaniana'ole Highway.

Housed within the Waimanalo Health Center is the Honolulu Community Action Program (HCAP)/Head Start Program. HCAP is a private non-profit community group whose goal is to provide opportunities for low-income families to become self-sufficient. HCAP also operates the "Head Start" preschool program, the largest preschool program in the State of Hawaii.

### *2.7.2 Schools and Library*

There are 2 public schools in Waimanalo— Blanche Pope Elementary School and Waimanalo Elementary-Intermediate School. Blanche Pope Elementary School, located on Hawaiian Homelands, aims to educate students about Hawaiian values. Waimanalo Elementary-Intermediate School's Library is part of the state library system. Community meetings are held at this library.

Various university research programs are incorporated into the Waimanalo community. These include the Waimanalo Agricultural Experiment Station located in the heart of Waimanalo, the Marine Animal Science Program at Sea Life Park located on the southern part of Waimanalo, and the Oceanic Institute that occupies the pier south of Waimanalo Beach; the institute is managed by University of Hawaii and Hawaii Pacific University.

### *2.7.3 Churches*

There are several churches of varying denominations spread out in the community.

### *2.7.4 Parks/Public Facilities*

Green spaces abound to offer a serene and rural atmosphere for park users, beach goers, and other Waimanalo residents and visitors. The ample green space allows visitors and residents to enjoy the scenery of the ocean and the Ko'olau Ranges. Major open spaces include the following:

- Waimanalo Beach Park stretches nearly 5.5 miles along the shoreline bordering Waimanalo Bay and is the longest stretch of sandy beach on Oahu. It is open to the public for beach use and camping.
- Waimanalo District Park sits in the heart of Waimanalo on Hihimanu Street. Several athletic fields surround the complex. It is also bordered by green agricultural parcels. A large gymnasium and pavilion, classroom space, offices, and recreation amenities make up the park facilities.

- Honolulu Polo Fields host polo tournaments during the months of May through October. Although it is not a public park, it provides a long stretch of open space along Kalanianaʻole Highway
- Bellows Air Force Station is located north of Waimanalo Beach. It continues the sandy beach coast of Waimanalo Bay. A portion of this property is part of the Marines training area and the other portion is open to the public for beach, picnic, and camping. There are several archaeological sensitive spots on the property as mentioned previously.

#### *2.7.5 Economic Sector*

There are two nodes of commercial activity in Waimanalo—both located on Kalanianaʻole Highway. They include supermarkets, restaurants, gas stations, convenient stores, and souvenir shops. The closest malls are located in Kaneohe and Kailua. A few kiosks are frequently located along Kalanianaʻole Highway.

Agricultural producers offer wholesale products for sale. A People's Open Market run by the City and County of Honolulu is open Thursday mornings from 7:15 a.m. to 8:15 a.m. Ranches offer horse riding lessons and tours around Waimanalo.

#### *2.7.6 Current Organizations and Training Facilities*

Various organizations around Waimanalo offer informational and training programs for the community. These services include: work training programs, driving lessons, car mechanics, and informational programs sponsored by the Federal, State, City and County, and private organizations. A few are listed and described below:

- Job Corps Hawaii is a federally-funded program that offers job-training skills to assist families with low income and disadvantaged youths ranging from 16-24 years old. This organization provides room and board to qualifying teens for training in culinary arts, facility maintenance, landscaping, pre-apprentice painting, auto mechanics, and business occupations and skills.
- Waimanalo Teen Program offers specific skill instruction along with recreational amenities for teens. This program offers training in auto mechanics, botanical, and agricultural skills.
- Queen Liliuokalani Children's Center (QLCC) is a satellite office that offers services to orphans and destitute children with priority given to Native Hawaiian ancestry. They host supports through individual and family service, group service, and community development service. Next to the Queen Liliuokalani Children's Center is the Kamehameha School's preschool.

- Waimanalo Homestead Community Center will be built near QLCC. Funded by DHHL, the plans for the center include office and conference rooms, a computer room and a commercial kitchen.

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## SECTION 3: PROJECT INFORMATION

### 3.0 Advisory Committee

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The Advisory Committee, consisting of Waimanalo residents and members with community ties, played a pivotal role in formulating the concept of the Waimanalo Community Business Center. This team helped to define the type of spaces needed, the sizes of the programmed spaces, and gave input into the findings of the consultant. The committee met with the Consultant at various milestones in this project in order to formulate decisions that would best meet the needs of the community. Members of the Advisory Committee are listed in Section 1, Method of Study and p. 1-2.

## 3.1 Program/Summary of Spaces

<b>Building Space</b>	<b>Space requirement</b>	<b>Purpose/Needs</b>
Classroom Spaces/ Multipurpose Room	<b>2000 s.f.</b>	<ul style="list-style-type: none"> <li>▪ To hold informational and vocational classes and meetings. Portions may double as a larger meeting room or multi-purpose room.</li> <li>▪ 4 classrooms approximately 500 s.f. each that can become one large gathering space.</li> <li>▪ Provide for expansion possibilities.</li> <li>▪ Capability for high-tech audio/visual equipment</li> <li>▪ Adjacencies: Restrooms, Public parking, Kitchen, Outdoor education spaces</li> </ul>
Office Spaces	<b>1500 s.f.</b>	<ul style="list-style-type: none"> <li>▪ To provide starting entrepreneurs with rentable office space. May be used for high-tech education or offices for administration of training programs.</li> <li>▪ An open area that may be partitioned for various users.</li> <li>▪ Provide for expansion possibilities.</li> <li>▪ Shared office equipment may be possible</li> <li>▪ Adjacencies: Restrooms</li> </ul>
Restrooms	<b>800 s.f.</b>	<ul style="list-style-type: none"> <li>▪ May be separate building. Enough to provide for facility.</li> <li>▪ Must provide accessible stalls.</li> <li>▪ Depends on final size and capacity of facility.</li> </ul>



		<ul style="list-style-type: none"> <li>▪ Provide for expansion possibilities.</li> <li>▪ Adjacencies: Public use areas.</li> </ul>
Commercial Kitchen	<b>1500 s.f.</b>	<ul style="list-style-type: none"> <li>▪ To provide a space for teaching culinary arts and to provide kitchen for related activities at classrooms/multi-purpose room.</li> <li>▪ Commercial oven, stove, large sink, microwave, stainless steel counters and large counter for teaching. Must provide accessible counters, stove, oven, etc.</li> <li>▪ Adjacencies: Multi-purpose room and Restrooms</li> </ul>
Additional space requirements	<b>Approx. 15-20% of the total space requirement</b>	<ul style="list-style-type: none"> <li>▪ Circulation space, such as hallways</li> <li>▪ Additional storage for classrooms, etc.</li> <li>▪ Landscaping and screening, setbacks</li> </ul>

<b>Outdoor Space</b>	<b>Space Requirement</b>	<b>Purpose</b>
Truck Parking/ Commercial Training Area	<b>2 – 2.5 acres</b>	<ul style="list-style-type: none"> <li>▪ To provide an area to keep large trucks and heavy equipment vehicles off the neighborhood streets. May double or can be combined as commercial license truck driver training area.</li> <li>▪ Approximately 20 spaces with secure fencing. Large unobstructed area for truck maneuvers.</li> <li>▪ Provide for expansion possibilities.</li> <li>▪ Adjacencies: Storage Space.</li> </ul>

Storage Space	<b>20,000 s.f.</b>	<ul style="list-style-type: none"> <li>▪ For storage of construction related materials.</li> <li>▪ Approximately 40 individually locked areas buffered from public view. Each space will be approximately 12' X 25'</li> <li>▪ Adjacencies: Public Parking</li> </ul>
Outdoor area for social and vocational interests	<b>10,000 s.f.</b>	<ul style="list-style-type: none"> <li>▪ To provide outdoor area for related vocational teaching, such as area for carpentry, etc.</li> <li>▪ Locker rooms to lock tools, etc., storage space, semi-covered area</li> <li>▪ Adjacencies: Classrooms, Restrooms, Public Parking</li> </ul>
Additional space requirements	<b>Min. 1 acre</b>	<ul style="list-style-type: none"> <li>▪ Buffer areas and space to expand should be considered.</li> <li>▪ Parking spaces for facility users, public.</li> <li>▪ As much space as available.</li> </ul>

**BUILDING SPACE: Approximately 5,800 s.f. + 20% circulation and storage space = Approximately 7,500 s.f.**

**OUTDOOR SPACE: Approximately 3.5 – 4 acres**

**MINIMUM TOTAL SITE AREA REQUIREMENT: Approximately 4 - 5 acres**

### 3.2 End Users

Although the target group for the Waimanalo Community Business Center is people seeking career improvement, the end-users of the facilities will include all residents of Waimanalo. Organizations and associations in Waimanalo, and affiliated associations on the island of Oahu,

may also be included as end-users and would occupy mostly office spaces, storage spaces, and the parking area for large vehicles.

### 3.3 Resources

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#### 3.3.1 Facility Resources.

There are several current programs with similar goals to the Waimanalo Community Business Center within Waimanalo. These include: Job Corp Hawaii, Waimanalo Teen Project and the Waimanalo Community Center at Queen Liliuoukalani Children's Center (see Section 2.7.6)

#### 3.3.2 Program Resources.

There are numerous resources which can provide teachers or who need the classroom space to train. These include:

- Native Hawaiian Vocational Education Program (NHVEP)  
Part of Alu Like, the NHVEP administers a federal grant to develop projects that will "better prepare Native Hawaiians to successfully enter, compete, and advance in the constantly changing technological workplace and improve their socio-economic status."
- Windward Community College (WCC) and Honolulu Community College (HCC)  
Both colleges have outreach programs that can be a source for trainers in culinary arts as well as the construction trades.
- Hawaii Carpenters Union  
Due to the current construction industry boom, the Hawaii Carpenters Union is establishing a training center at Kalaeloa and may be able to help in training sessions at Waimanalo.
- Waimanalo Construction Coalition  
This is a program that helps approximately 400 members of the Waimanalo community to find training and jobs in the construction industry.

#### 3.3.3 Funding Resources

Possible government funding sources include the Economic Development Administration (EDA), a federal program that provides grants for the construction of public facilities necessary to generate private sector employment. One of EDA's main goals is to help communities within areas and regions that are economically distressed alleviate persistent conditions of unemployment and underemployment.

The Community Development Block Grant program may also provide funding as it is a flexible program that provides communities with resources to address a wide range of unique

community development needs principally for persons of low- and moderate-income. The funding can be used for acquisition or construction.

Furthermore, since the facility is designed to help a community that consists of many Native Hawaiians, there are several private funding sources that may be available. These funding sources include both the Castle and Weinberg Foundations; both foundations have in the past provided grants for community economic development, as well as to assist Native Hawaiians in achieving economic self-sufficiency.

## SECTION 4: SITE SELECTION AND EVALUATION

### 4.0 Site Selection Methodology

The initial step of the site selection process was to identify the minimum criteria to meet the basic needs of the facility program as defined in Section 3. Beyond the minimum criteria, additional criteria were developed to determine the suitability of each site with respect to the programmatic needs of this project. Advisory Committee comments and suggested sites were incorporated into the preliminary site selection process.

Through input from the community, twelve sites were originally considered. The twelve sites and their respective owners are:

1. Old Quarry Site – Queen Liliuoukalani side (DHHL)
2. Old Quarry Site + DHHL Parcel on Kalanianaʻole and Nakini (DHHL)
3. Waimanalo Teen Project Site (leased from DLNR)
4. Portion of Mrs. Lee’s Farm Site (leased from DLNR)
5. Portion of Waimanalo Beach Park (owned by State, administered by City)
6. Portion of Bellows Air Field Station (Federal)
7. Portion of the Aruda Site near Saddle City Road (leased from DLNR)
8. Existing Shopping Center (private)
9. State owned land on Kakaina St. (DLNR)
10. Old Meadow Gold Dairy Farm (DLNR)
11. Waimanalo District Park (City and County of Honolulu)
12. Yamada Farm (leased from DLNR)

**Map 4-1** shows the overall study area and the relative location of sites initially considered.

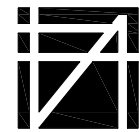
### 4.1 Minimum Site Criteria

#### *4.1.1 Size*

A minimum of 5 acres on a single lot or combination of nearby lots is needed to accomplish the basic goals of the facility program due to the needs of the outdoor space alone (**see Section 3 for the Facility Program**). Any site less than five acres cannot be considered appropriate for this project. This criterion eliminated the existing shopping center.

#### *4.1.2 Land Use*

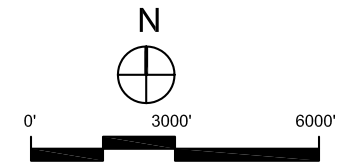
Lands rated with a high potential for agricultural use by the Agricultural Lands of Importance to the State of Hawaii rating system that are currently used for agriculture, and lands that are currently zoned for park use, were immediately rejected because of the community’s desire to retain lands that contribute and support the rural and agricultural character of Waimanalo. Sites located within State Land Use Agricultural and Conservation Districts (**see Section 2.2**) were not considered viable because of the desires of the community to retain agricultural designated lands for agricultural uses and activities, as well as being subject to additional



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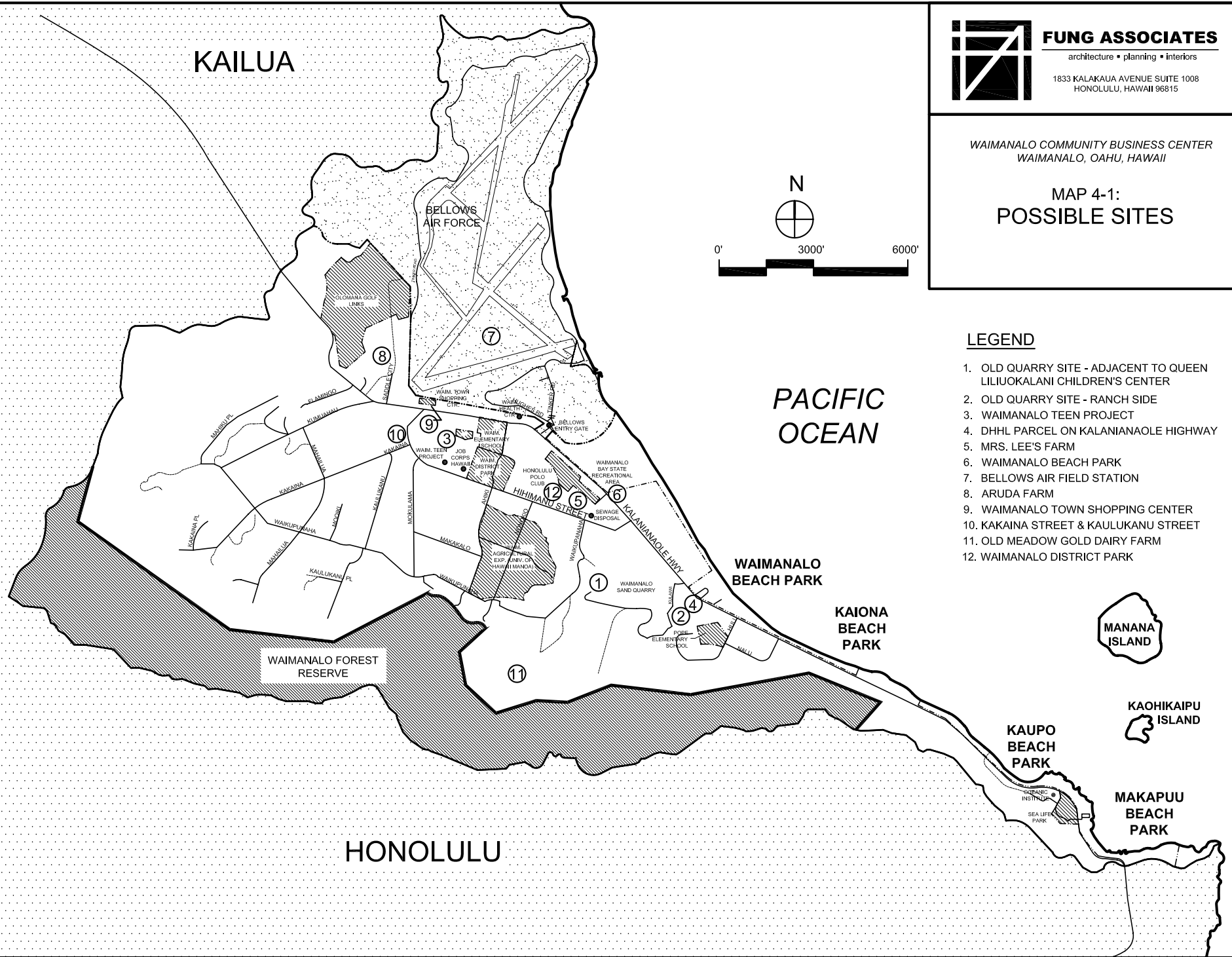
WAIMANALO COMMUNITY BUSINESS CENTER  
 WAIMANALO, OAHU, HAWAII

# MAP 4-1: POSSIBLE SITES



## LEGEND

1. OLD QUARRY SITE - ADJACENT TO QUEEN LILIUOKALANI CHILDREN'S CENTER
2. OLD QUARRY SITE - RANCH SIDE
3. WAIMANALO TEEN PROJECT
4. DHHL PARCEL ON KALANIANA'OLE HIGHWAY
5. MRS. LEE'S FARM
6. WAIMANALO BEACH PARK
7. BELLOWS AIR FIELD STATION
8. ARUDA FARM
9. WAIMANALO TOWN SHOPPING CENTER
10. KAKAINA STREET & KAULUKANU STREET
11. OLD MEADOW GOLD DAIRY FARM
12. WAIMANALO DISTRICT PARK



permitting requirements and processes that would preclude the timely establishment of the project and proposed facilities. This last criterion eliminated the following sites: Old Meadow Gold Dairy Farm site, Waimanalo District Park site, Waimanalo Beach Park site, Yamada Farm site, and Mrs. Lee's Goat Farm site. It should be noted, however, that Attorney General Opinion 72-21 of the Hawaiian Homes Commission Act states that Hawaiian home lands are not subject to county zoning requirements.

#### 4.1.3 Historic Sites and Environment

While there are often inadvertent finds of ancient Hawaiian artifacts and *iwi* (the bones of the dead, considered the most cherished possession, were hidden, and hence there are many figurative expressions with *iwi* meaning life, old age<sup>1</sup>) in the course of normal construction, all efforts will be taken to avoid any adverse impact on known historic sites. Map 2-11 illustrates the presence of several historic sites along the perimeters of Waimanalo. As this project is an important community-based project, any site that would adversely impact a known historic site was immediately eliminated.

A number of wetlands dot the landscape of Waimanalo. Sites that would likely have an adverse impact on wetland environs and associated wildlife were eliminated. Parts of Bellows were eliminated based on this criterion.

## 4.2 Site Criteria

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The following categories were developed to better assess the various conditions of the remaining sites for the Waimanalo Community Business Center.

### PHYSICAL SITE CRITERIA

#### A. Utilities

##### 1. Water

- GOOD: Water is readily available to the site for site's needs and for fire protection.
- FAIR: Water is planned and will be available to the site per BWS Planning.
- POOR: The site has no access to water service. Connection to existing system will not be easily developed.

##### 2. Sewer

- GOOD: Municipal sewer service is available to the site.

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<sup>1</sup> Mary Kawena Pukui and Samuel H. Elbert, *Hawaiian Dictionary*. 1986 rev. ed. (Honolulu: University of Hawaii Press, 1986), 56.

FAIR: Municipal sewer system is planned for the site per Wastewater Management.

POOR: The site has no access to the municipal sewer system.

### 3. Power

GOOD: Electricity is readily available to the site with minimal improvements to the local power transmission system.

FAIR: Electricity is planned and will be available to the site.

POOR: The site has no access to electricity service. Connection to existing system will not be easily developed.

## B. Roadway and Accessibility

### 1. Roadway Improvement

GOOD: No on- or off-site development cost is anticipated.

FAIR: Off-site development cost is estimated at less than \$100,000.

POOR: Off-site development cost is estimated at more than \$100,000.

### 2. Accessibility (to promote alternatives to automobile travel)

GOOD: There is easy access to bus route.

FAIR: Existing bus route is within 10 minutes walking distance.

POOR: Existing bus route is farther than 10 minutes walking distance.

## C. Site Characteristics

### 1. Slope

GOOD: The average slope of the site is less than 5 percent.

FAIR: The average slope of the site is between 5 and 10 percent.

POOR: The average slope of the site is more than 10 percent.

### 2. Site Clearing

GOOD: Site is generally clear and requires minimal effort for clearing.

FAIR: Site clearing is estimated at less than \$50,000.

POOR: Site clearing is estimated at more than \$50,000.



### 3. Grading

- GOOD: Soil is in general suitable for development with little grading required.
- FAIR: Adverse soil conditions exist and soil preparation/grading work is estimated at approximately \$100,000.
- POOR: Adverse soil conditions exist and soil preparation/grading work is estimated at more than \$100,000.

### 4. Expandability

- GOOD: The usable land is more than 10 acres.
- FAIR: The usable land is 6 to 10 acres.
- POOR: The usable land just meets the minimum requirement at 5-6 acres.

### 5. Lot dimensions

- GOOD: Over 140 feet in width dimension, can easily accommodate a large truck or city bus standard "U" drive turning dimension.
- FAIR: Meets minimum width of 120 feet to meet a school bus standard "U" drive turning dimension.
- POOR: Does not meet minimum 120 feet in width dimension.

## COMMUNITY CHARACTERISTICS

### A. Government

#### 1. State Land Use

- GOOD: The site is within the Urban district.
- FAIR: The site is within an Agricultural or Rural district and is adjacent to the Urban district. A petition for a boundary amendment is required, but approval is likely.
- POOR: The site is within Conservation district or Agricultural/Rural and not adjacent to the Urban district. Boundary amendment may be more difficult because it is not adjacent to the Urban district.

#### 2. ALISH

- GOOD: The site is not classified in the ALISH classification system.
- FAIR: The site is classified in the ALSIH classification system but has not been used for agricultural production within the last 5 years and is rated as Other Important Agricultural Land.

POOR: The site is rated as Prime Agricultural land, but historically has not been used for agriculture or only a part of the site is rated Prime Agricultural land.

3. Koolaupoko Sustainable Communities Plan

GOOD: Development of the project at the proposed site is supported by the provisions of the Koolaupoko Sustainable Communities Plan and is within the area designated Commercial.

FAIR: Development of the project at the proposed site is supported by the provisions of the Koolaupoko Sustainable Communities Plan, but not within the area designated Commercial.

POOR: Development of the project at the proposed site is contrary to the provisions of the Koolaupoko Sustainable Communities Plan.

4. Special Management Area (SMA)

GOOD: The entire site is outside of the SMA, therefore coastal resources will not be impacted.

FAIR: A minor portion of the site is within the SMA such that development could be designed to avoid uses within the SMA.

POOR: The entire site is within the SMA.

5. Tsunami / Flood Hazard

GOOD: The entire site is outside of the flood / tsunami hazard zone.

FAIR: A minor portion of the site is within the flood or tsunami hazard zone such that development could be designed to avoid uses within the flood or hazard zones.

POOR: The entire site is within the flood / tsunami hazard zone.

6. Zoning

GOOD: The site's current zoning permits uses contemplated in the project.

FAIR: Although the site is not zoned appropriately, it is adjacent to a properly zoned parcel which could be less problematic to re-zone.

POOR: The site's zoning does not permit the proposed uses contemplated in the project and is not adjacent to a properly zoned parcel. This would require "spot" zoning which is more difficult to gain approval to re-zone.

## B. Community Impacts

### 1. Use Compatibility

- GOOD: The site is located adjacent to public or commercial developments which will allow project to share facilities and resources. No perceivable negative impact on traffic or noise to neighborhood.
- FAIR: The site is located in close proximity to public or commercial developments which may allow project to share facilities and resources. Project may have moderate negative impact on traffic or noise to neighborhood.
- POOR: There are no existing or proposed developments of compatible use located in close proximity to the site. Project location will have negative impact on traffic or noise to neighborhood.

### 2. Aesthetic Value

- GOOD: The site is not an aesthetic asset to the community, and if developed, the project would not interfere with scenic vistas.
- FAIR: The site has little aesthetic value to the community, or may partially obstruct scenic vistas viewed from public vantage points when it is developed.
- POOR: The site is an aesthetic asset to the community, or will obstruct scenic vistas viewed from public vantage points when it is developed.

### 3. Displacement of Existing Uses or Tenants

- GOOD: Development of this site will not displace any existing tenants.
- FAIR: Development of this site will share the existing facilities with the present users or tenants.
- POOR: Development of this site will cause displacement of existing tenants.

## LAND COST AND SCHEDULE

### A. Land Cost

- GOOD: There is no discernible cost in acquiring the land.
- FAIR: Acquisition cost of the land is estimated within \$1,000,000.
- POOR: Acquisition cost of the land is estimated at over \$1,000,000.

B. Development Schedule

- GOOD: Acquisition may be accomplished within 12 months from start of acquisition process for this site to be ready for development.
- FAIR: Acquisition may take between 12 to 24 months from start of acquisition process for this site to be ready for development.
- POOR: Acquisition will take more than 24 months from start of acquisition process for this site to be ready for development.

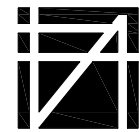
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### 4.3 POTENTIAL SITES

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The following sites met the minimum criteria and are rated on the following pages (**see Map 4-2 for site locations**):

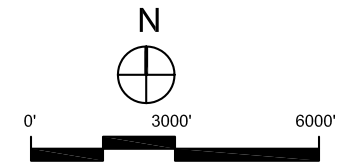
1. Old Quarry Site (DHHL)
2. Old Quarry Site + Nakini Street Site (DHHL)
3. Waimanalo Teen Project Site (leased from DLNR)
4. Aruda Property (leased from DLNR)
5. Kakaina Street Site (DLNR)
6. Portion of Bellows Air Field Station (Federal)



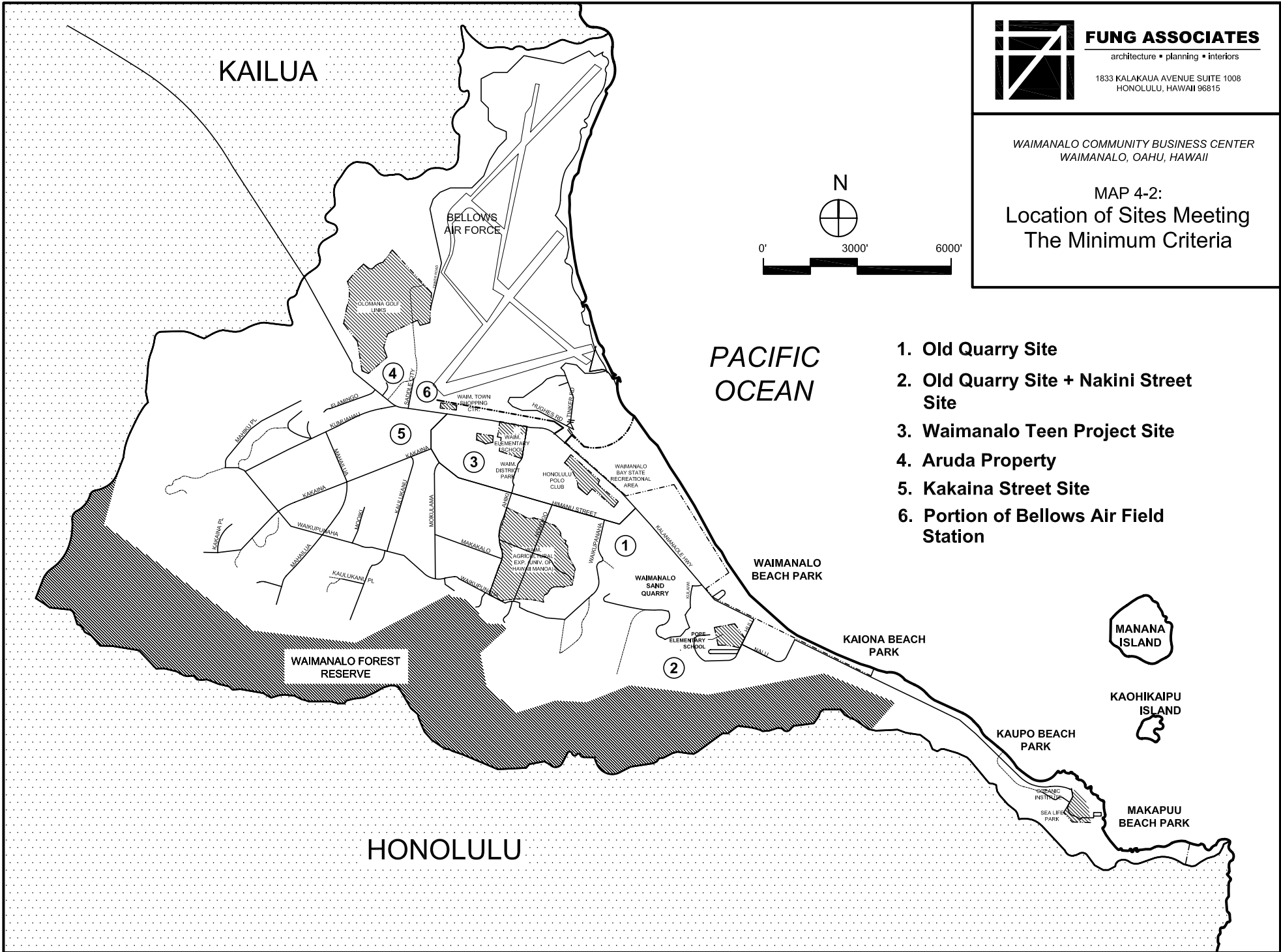
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MAP 4-2:  
Location of Sites Meeting  
The Minimum Criteria



- 1. Old Quarry Site
- 2. Old Quarry Site + Nakini Street Site
- 3. Waimanalo Teen Project Site
- 4. Aruda Property
- 5. Kakaina Street Site
- 6. Portion of Bellows Air Field Station



### 4.3.1 Site 1A & 1B Old Quarry Site

TMK: 4-1-008:002



Quarry area looking mauka from berm



Quarry looking towards Queen Lilioukalani Children's center

This report covers two options:

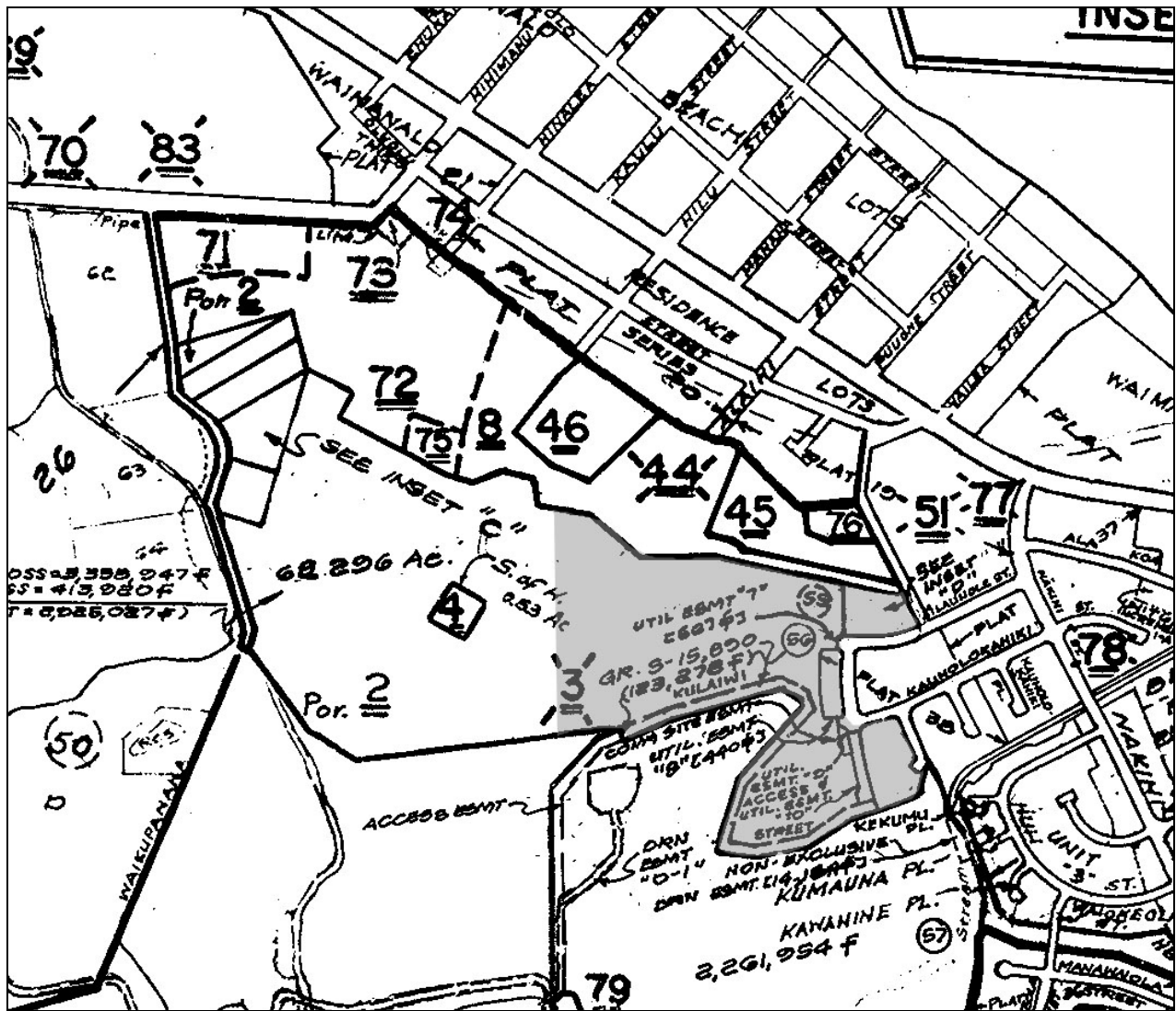
Option A: The Project Champion can work under the Waimanalo Hawaiian Homes Association (WHHA) to produce a joint community/economic development center. This scenario will allow WHHA to utilize the training connections that Waimanalo Construction Coalition has already established and provide the WCBC with existing and new facilities.

Option B: The WCBC project can stand alone working directly with the Department of Hawaiian Homelands. Part of the mandate for Hawaiian Home Lands is to ensure an income is received to help in the development of homestead property. Therefore, a business plan and income must be generated from this property under this scenario.

PHYSICAL SITE CRITERIA		
Criterion	Comments	Rating
Utilities		
Water	Option A: Already available to the developed property. Option B: Water will need to be extended into the property.	G F
Sewer	Option A: Already available to the developed property. Option B: Lateral will need to be extended further into the site.	G F
Power	Currently available to the developed portion of the property.	G
Access		
Roadway Improvement	A new access road may be needed to avoid trucks going through the residential area or limit truck traffic.	P
Accessibility	The site is a far walk from Kalanianaʻole Highway, where the bus currently runs.	P
Site Characteristics		
Slope	Option A: Though much of the site has a slope greater than 10%, there is enough flat developable land. Option B: If WCBC cannot share the WHHA project site, the project will be in an area with greater than 10% slope.	G P
Site clearing	Option A: The site is clear in the WHHA project area. Option B: There is considerable brush above the existing community center developed by the Waimanalo Hawaiian Homes Association.	G F
Grading	Option A: The area around WHHA does not need substantial work. Option B: Substantial work will be required to fill an existing sink hole on the property due to its historic use as a quarry.	G P
Expandability	Both options have a total of 68.296 acres which is ample space for the project with room to grow and provide buffer space.	G
Lot Dimensions	Both options offer a large enough parcel to meet the over 140 feet dimension in any direction.	G
COMMUNITY CHARACTERISTICS		
Government		
State Land Use	It is currently zoned Agriculture.	P



ALISH	Land is not designated as a land of agricultural importance; although a portion on the west side of the site is designated "Other Important Agricultural Land" (see Map 2-7). Parcel is large enough to avoid using any portion in ALISH designated important. Also, past use as quarry has rendered much of the land inhospitable for crops, and DHHL has no plans to use it for agriculture.	G
Koolaupoko Sustainable Community Plan	Designated Agricultural Land in the plan. However, it meets many of the intentions of the plan by keeping the agricultural lands open and maintaining important view planes.	F
Special Management Plan (SMA)	Not in SMA.	G
Tsunami/Flood Hazard	Vast majority of land is rated Firm X, the areas least likely to flood. A part is rated Firm Zone A, which is still an area not likely to flood and has no building elevation requirements.	G
Zoning	The land is DHHL lands, which are exempt from certain land use procedures but subject to DHHL restrictions.	F
Community Impacts		
Use Compatibility	Option A: The project will likely share the existing facilities for classes, commercial kitchen, restrooms, etc. However, its proximity to residential neighborhood may have some noise and traffic impacts. Option B: WCBC will construct new facilities.	F P
Aesthetic Value	Since the site is tucked in the back of the valley, proposed improvements would not be visible from any major thoroughfare.	G
Displacement	Neither option will displace any tenant.	G
<b>DEVELOPMENT CRITERIA</b>		
Land Cost	Option A: No appreciable land cost. Option B: High land cost as DHHL may require market rate income. Exactly how much is not known at this time.	G P
Development Schedule	Option A: Good development schedule as WHHA already has started developing the property. Option B: May take one to two years as the WCBC project will need to produce a business plan and find funding.	G F



**FIGURE 4-1:**  
Old Quarry Site/Queen Liliuoukalani Site  
TMK: 4-1-008:002 (Portion)

### 4.3.2 Site 2 Old Quarry Site + Nakini Street Site

TMK: 4-1-008:002 & 4-1-019:032



Quarry looking towards Queen Liliuokalani Children's center



Quarry looking towards Queen Liliuokalani Children's center

With this alternative, the economic development center will be located on the smaller but more publicly accessible Nakini Street site. The truck and equipment storage and the truck driver training center will be developed on the Old Quarry Site. A community center with commercial kitchen is already being developed on that site.

Should the WCBC and WHHA choose not to work together on the project, the Nakini Street site will no longer be available for the WCBC project.

PHYSICAL SITE CRITERIA		
Criterion	Comments	Rating
Utilities		
Water	The Nakini Street portion also has water readily available.	G
Sewer	Currently using cesspool, will need to upgrade at Nakini Street site	F
Power	Currently available to the developed portion of the property.	G
Access		
Roadway Improvement	None needed for the Nakini St. property; however, the Old Quarry site may still need a new access road.	F
Accessibility	Accessibility to the Nakini Street site is as excellent as it is on Kalanianaʻole Highway, where the bus currently runs. All public programs could be developed on Nakini Street site.	G
Site Characteristics		
Slope	Essentially flat for the Nakini Street site and developed areas of the Old Quarry site.	G
Site clearing	The Nakini Street site needs no clearing.	G
Grading	The Nakini St. site is flat.	G
Expandability	The property has a total of 68.296 acres + 82,402 square feet which is ample space for the project with room to grow and provide buffer space.	G
Lot Dimensions	The smallest dimension is 164.65 feet.	G
COMMUNITY CHARACTERISTICS		
Government		
State Land Use	The Nakini St. site is state zoned Urban, but the Old Quarry site is zoned Agriculture	F
ALISH	The Nakini Street location is not rated as agricultural lands.	G
Koolaupoko Sustainable Community Plan	Designated Agricultural Land in the plan. However, it is currently used for community purposes and follows the overall intent of the Koolaupoko plan to minimize development.	F
Special Management Plan (SMA)	Not in SMA.	G
Tsunami/Flood Hazard	Rated Firm Zone A and X	G

Zoning	The land is part of DHHL lands, which are exempt from certain land use procedures but subject to DHHL restrictions.	F
Community Effects		
Use Compatibility	There is a farmer's market already at the Nakini Street site as well as a usable community center. There should be no additional traffic to the Nakini site, but there would still be a moderate impact on the area surrounding the Old Quarry site.	F
Aesthetic Value	The Nakini Street site is located along Kalaniana'ole Highway and will be highly visible. Among residences a community center may be compatible; however, the storage and trucking aspects of the project should not be on the Nakini Street site.	F
Displacement	Facilities will be shared, therefore no displacement	G
DEVELOPMENT CRITERIA		
Land Cost	No appreciable land cost.	G
Development Schedule	Good development schedule as WHHA already has started developing the property.	G



### 4.3.3 Site 3 Waimanalo Teen Project Site

TMK: 4-1-009-265



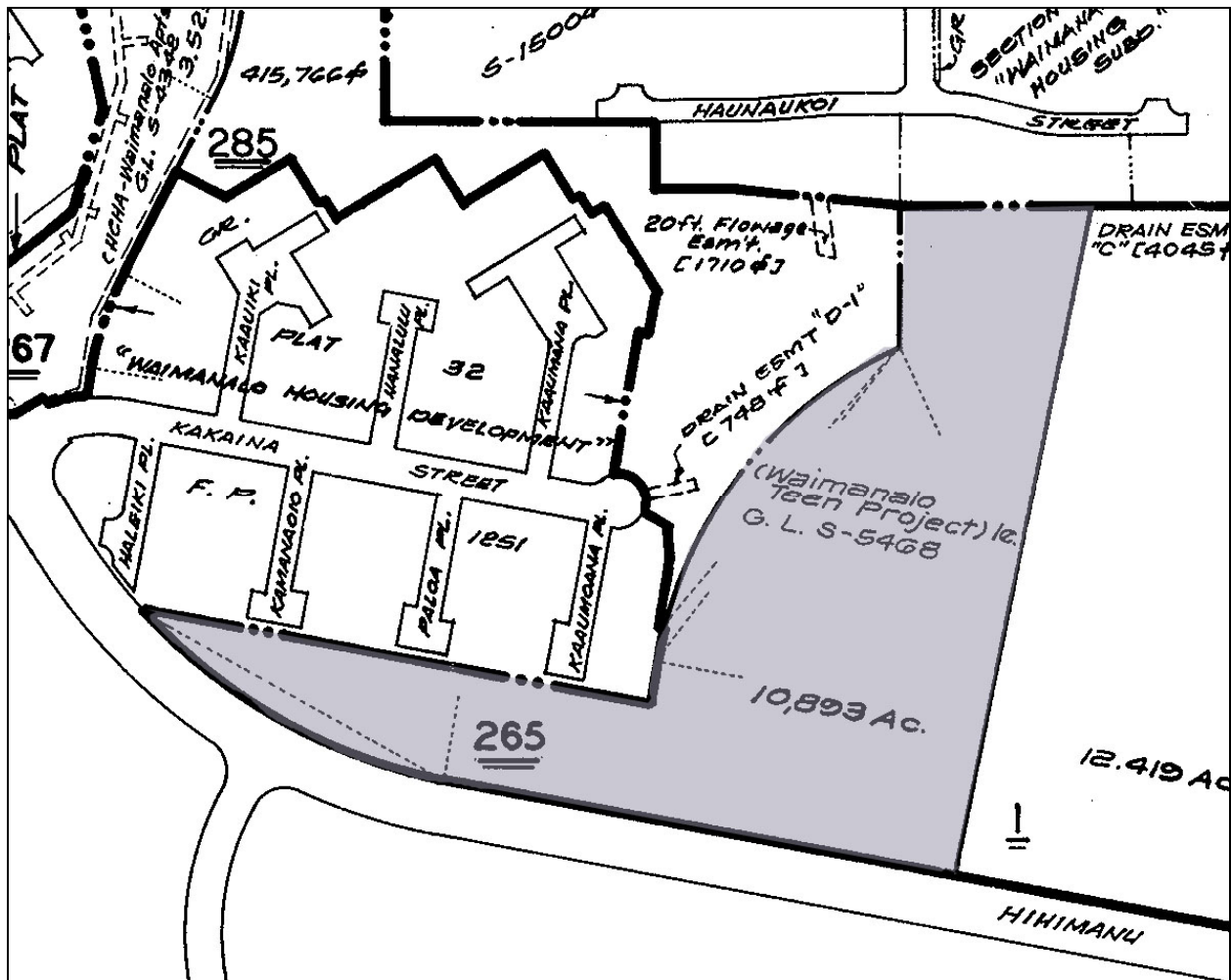
Waimanalo Teen project site from Hihimanu Street

The current lessee of this land owned by the State of Hawaii, under the jurisdiction of DLNR, has expressed a desire to help the project and has offered to share this site with the WCBC. This site will include the use of some of the existing facilities, and it will require partnering with the Waimanalo Teen Project and perhaps Job Corps Hawaii located at the next parcel. If the lessee is not willing to share, this project will not meet the minimum criteria due to the remaining size of the lot.

PHYSICAL SITE CRITERIA		
Criterion	Comments	Rating
Utilities		
Water	Already available to the developed property.	G
Sewer	Already available to the developed property.	G
Power	Already available to the site.	G
Access		
Roadway Improvement	None needed.	G
Accessibility	Location is directly accessible from Hihimanu Street, one of the main thoroughfares of Waimanalo. Though Hihimanu Street is not on a bus route, it is centrally located within Waimanalo and within 10 minutes walking from Kalanianaʻole Highway.	F
Site Characteristics		
Slope	Relatively flat	G
Site clearing	None needed	G
Grading	Minimal grading required	G
Expandability	While the property is approximately 14 acres, two large structures and flood lands occupy approximately half of the property leaving minimally enough space for the project and virtually no space for expansion.	P
Lot dimensions	The width on the street side of the lot is over 400 feet.	G
COMMUNITY CHARACTERISTICS		
Government		
State Land Use	It is currently within State Land Use designation Urban.	G
ALISH	Most of the land is not in Prime or Other Important Agricultural Lands (see Map 2-7).	G
Koolaupoko Sustainable Community Plan	Designated Agricultural Land in the plan and in a relatively open spaced area. The industrial portions of the project do not conform to the plan.	P
Special Management Plan (SMA)	Not in SMA.	G
Tsunami/Flood Hazard	Rated Firm Zone AE which has a 100 year flood rating. There is also a Floodway running through the property which involves greater building requirements.	P
Zoning	It is currently zoned Agriculture which does not allow for the proposed use. Re-zoning or a variance through the City will be required.	F



Community Effects		
Use Compatibility	It is next to the Job Corp facility and the Teen Project. These programs could benefit from this training facility. There are very few residences in the immediate area and since it is on Hihimanu St., one of the main thoroughfares of Waimanalo, there should be minimal traffic impact.	G
Aesthetic Value	The area is surrounded by agricultural lots and is therefore a relatively wide open green space. Any construction in this area will take away some open space. Existing structures are compatible with the surrounding. Any industrial looking buildings may detract from the open, agricultural setting and area may appear too densely developed.	P
Displacement	The WCBC would work together with the Waimanalo Teen Project.	G
<b>DEVELOPMENT CRITERIA</b>		
Land Cost	Owned by the State under DLNR jurisdiction, it is currently leased out to the Teen Project. Would sub-lease from the Teen Project. The current director has expressed a willingness to share the property.	G
Development Schedule	An agreement with DLNR and Teen Project for use of land would need to be developed and would work under the Waimanalo Teen Project. The alteration of use would need to go through the Land Board.	F



**FIGURE 4-3:**  
Waimanalo Teen Project Site  
TMK: 4-1-009:265

### 4.3.4 Site 4 Aruda Property

TMK: 4-1-013:032

This alternative relies on the cooperation of the current lessee of the property or would require condemnation of land for public good. The Aruda family had previously expressed interest in sharing land in the same way as the Waimanalo Teen Project would work.

PHYSICAL SITE CRITERIA		
Criterion	Comments	Rating
Utilities		
Water	Already available to the developed property.	G
Sewer	Property currently using cesspool, will need to develop sewer line from Kalanianaʻole Highway	F
Power	Currently available to the site.	G
Access		
Roadway Improvement	None needed.	G
Accessibility	Location is directly accessible from Kalanianaʻole Highway.	G
Site Characteristics		
Slope	Relatively flat	G
Site clearing	Relatively clear.	F
Grading	Location in a floodway may require extensive grading and building restrictions.	P
Expandability	The property is 16.02 acres.	G
Lot dimensions	The lot is approximately 400 feet in width along Kalanianaʻole Highway.	G
COMMUNITY CHARACTERISTICS		
Government		
State Land Use	It is currently within State Land Use designation Urban.	G
ALISH	The land is not in Prime or Other Important Agricultural Lands (see Map 2-7); however, land has been used for stables.	F
Koolaupoko Sustainable Community Plan	Designated Agricultural Land in the plan however, the location next to the highway and close to the shopping center complies with the intent of the plan.	F
Special Management Plan (SMA)	Located in the SMA.	P

Tsunami/Flood Hazard	Rated Firm Zone AE and X. Over half of the property is in a 100-year flood way which means there are very strict requirements for any structure in those areas.	P
Zoning	It is currently zoned Agriculture which does not allow for the proposed use. Re-zoning or a variance through the city will be required.	P
Community Effects		
Use Compatibility	There is very little development in the immediate area of the Aruda property; however, its location along Kalanianaʻole Highway should not cause any adverse traffic condition	F
Aesthetic Value	The area is surrounded by open space. However, the site is large enough to provide buffer space and visual barriers.	F
Displacement	The desire is for the proponent of this project is to work together with the Arudas.	G
<b>DEVELOPMENT CRITERIA</b>		
Land Cost	Owned by the State of Hawaii and under DLNR jurisdiction, it is currently leased out to the Aruda family. The current lessee has expressed a willingness to share the property in a similar fashion as the Teen Project.	G
Development Schedule	An agreement with DLNR and the Aruda family for use of land would need to be developed. There are mechanisms within DLNR to provide land for a public good through the County. However, due to its location in the SMA, any development would require a special permit process that includes approval by City Council.	P

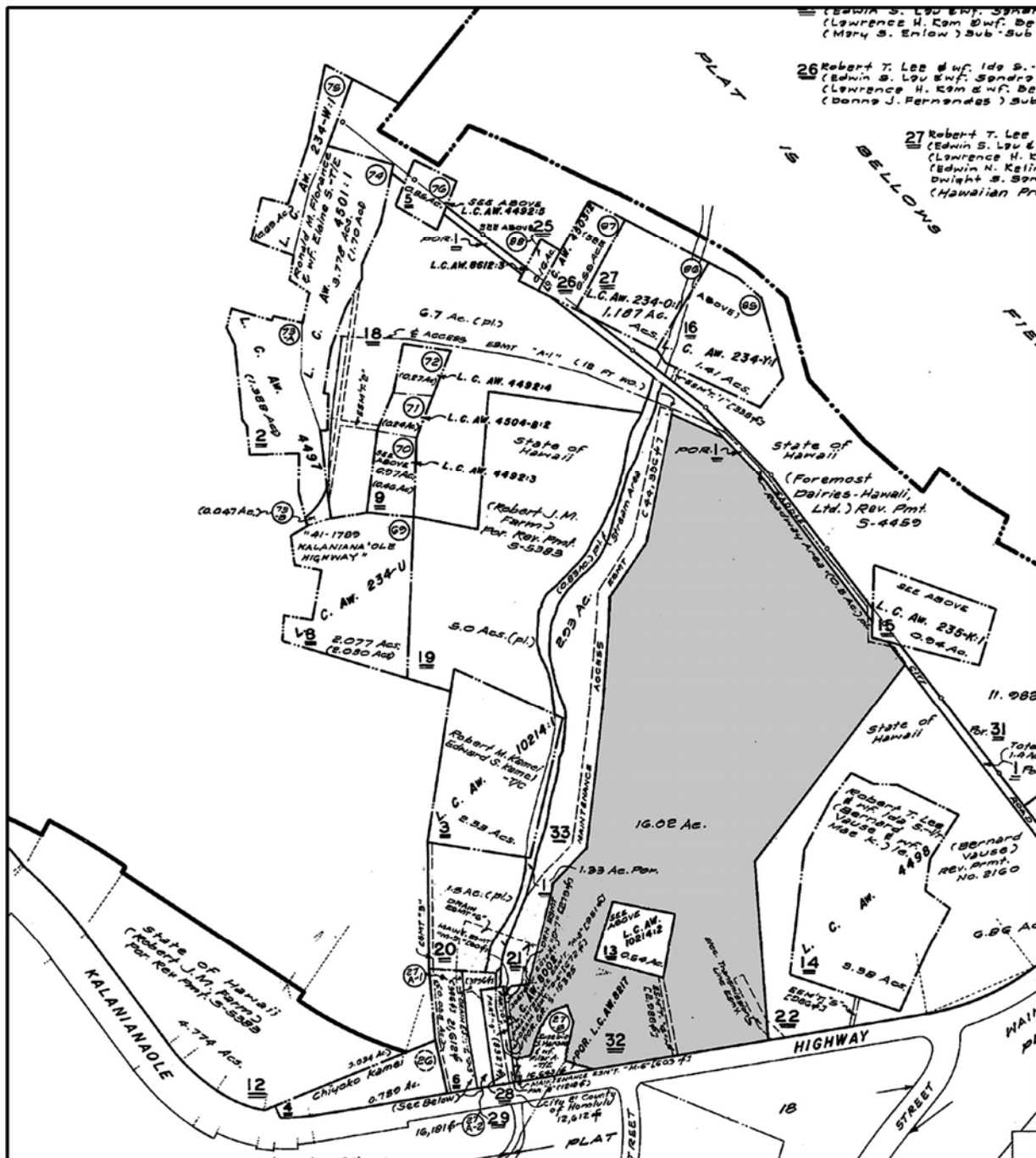


Figure 4-4:  
Aruda Property  
TMK: 4-1-013:032

### 4.3.5 Site 5 DLNR Land along Kakaina Street

TMK: 4-1-008:091, 010, 081



DLNR Property from Hihimanu Street



DLNR Property from Kakaina Street

The property is currently vacant except for a small portion that is leased on a month-to-month basis. Much of it is overgrown and has been used as a dumping ground. DLNR has recently requested comments to lease it as agricultural land, and therefore this site may no longer meet the minimum requirements if leased for agriculture.

PHYSICAL SITE CRITERIA		
Criterion	Comments	Rating
Utilities		
Water	Already available to the developed property along Hihimanu Avenue.	G
Sewer	Already available to the developed property along Hihimanu Avenue.	G
Power	Currently available to the site.	G
Access		
Roadway Improvement	None needed.	G
Accessibility	Location is directly accessible from Hihimanu Street, one of the main thoroughfares of Waimanalo. Though Hihimanu Street is not on a bus route, it is centrally located within Waimanalo and within 10 minutes walking from Kalanianaʻole Highway.	F
Site Characteristics		
Slope	Relatively flat.	G
Site clearing	There is extensive brush on the vacant property.	P
Grading	May require some grading since the sight is slightly lower than the road in some areas.	G
Expandability	At approximately 5 Acres, it is very minimal in size, therefore barely meeting the program requirements.	P
Lot dimensions	Though one portion of the lot narrows to approximately 48', the greater majority of the lot has a width of 190' or greater.	F
COMMUNITY CHARACTERISTICS		
Government		
State Land Use	The majority is within State Land Use designation Urban and approximately 1/3 is in Agriculture.	F
ALISH	Most of the land is in Prime Agricultural Lands (see Map 2-7).	P
Koolaupoko Sustainable Community Plan	SCP's policy is for agriculture. Proximity to Teen Project dilutes its adverse impact to policies on agriculture.	F
Special Management Plan (SMA)	Not in SMA.	G
Tsunami/Flood Hazard	Rated Firm Zone AE at the valley side edge and the majority of the lot Firm Zone X	F

Zoning	It is currently zoned Agriculture which does not allow for the proposed use. Re-zoning or a variance through the City will be required.	P
Community Effects		
Use Compatibility	It is fairly close to the Job Corp facility and the Teen Project. Proximity to these programs could be mutually beneficial as resources and facilities could be shared. Also, since it is adjacent to Hihimanu St., there should be negligible impact on noise and traffic.	G
Aesthetic Value	The area is close to residential and some industrial-looking farm buildings at its perimeter. However, since there is not enough land to provide adequate buffer zones, the industrial portions of the project will detract.	P
Displacement	As a vacant lot, there will be no displacement.	G
<b>DEVELOPMENT CRITERIA</b>		
Land Cost	Under the jurisdiction of DLNR, there are mechanisms to utilize land for public good which could reduce acquisition costs to a minimum.	G
Development Schedule	An agreement with DLNR would need to be developed and approved through the Land Board. Also, the property will be going through the auction process before it can be considered to meet the minimum criteria for this project, and this will take considerable time.	P



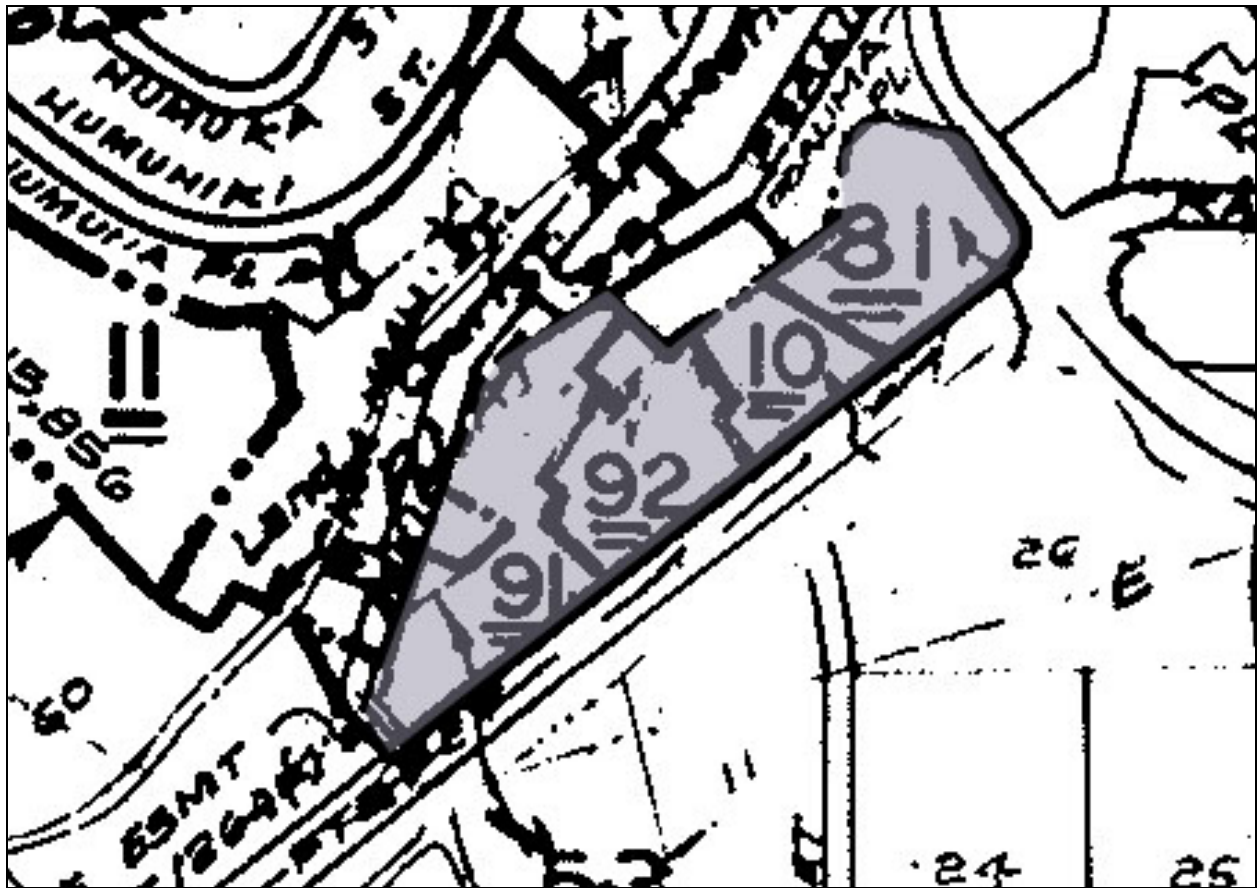


FIGURE 4-5:  
DLNR Land along Kakaina Street  
TMK: 4-1-008:091,010,081

### 4.3.6 Site 6 Portion of Bellows Air Field TMK: 4-1-015:001 Portion



Bellows from shopping center areas



Bellows from side of shopping center at stream

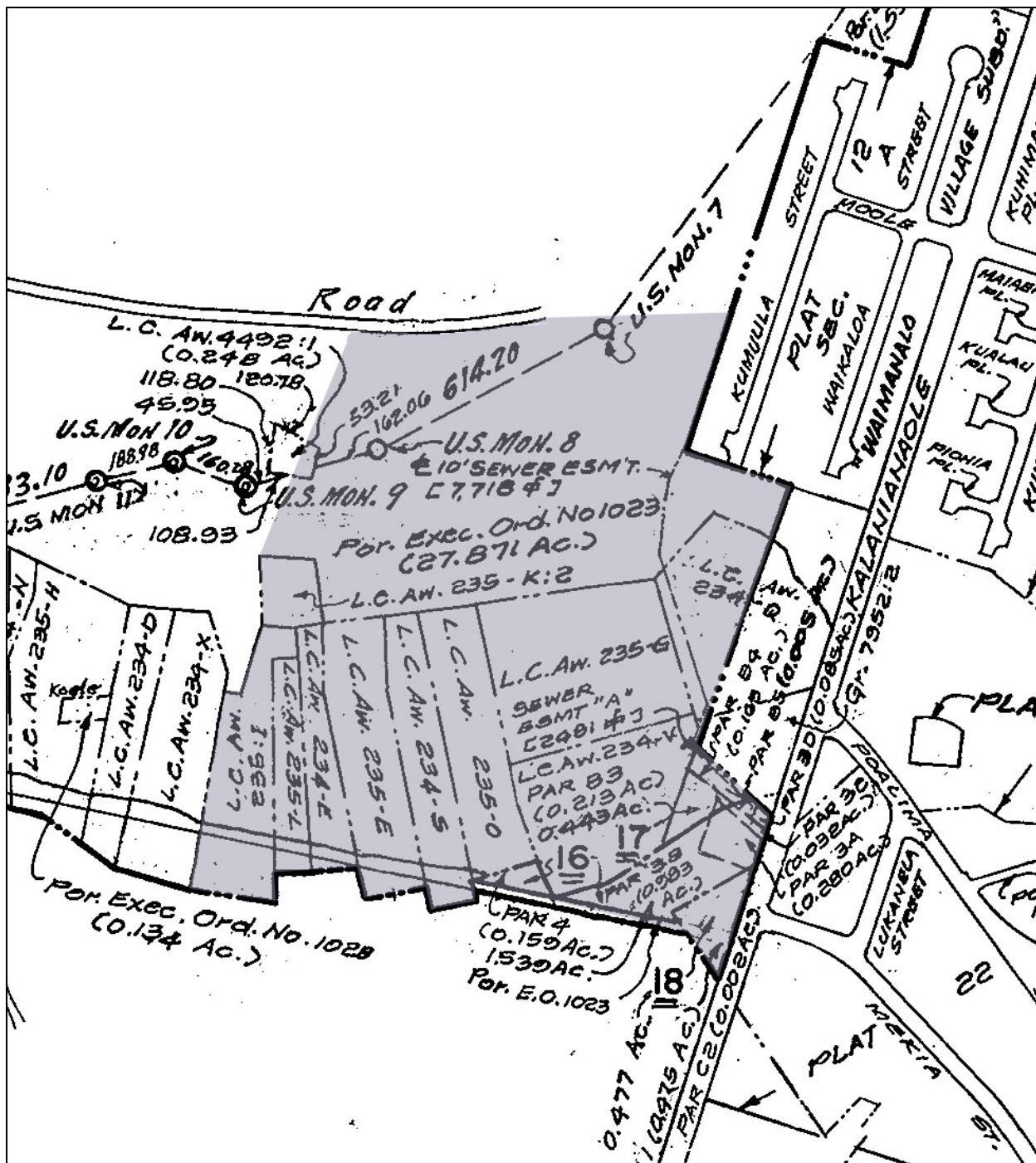


Bellows from side of shopping center

Bellows is currently under Marine Corp and Air Force control. However, there are portions that have been offered to DHHL and DLNR. The area that would meet the criteria for the WCBC project is adjacent to and behind of the existing shopping center on Kalanianaʻole Highway.

PHYSICAL SITE CRITERIA		
Criterion	Comments	Rating
Utilities		
Water	Already available to portions of the developed property. May need to extend into property.	F
Sewer	Already available to property.	G
Power	Currently available to the site.	G
Access		
Roadway Improvement	None needed, access road to Bellow already existing.	G
Accessibility	Location is accessible from Kalanianaʻole Highway, but a pedestrian catching the bus would have to walk around the shopping center. Also, it is a far distance to walk from the residences.	F
Site Characteristics		
Slope	Relatively flat	G
Site clearing	Brush on a good portion of the site.	F
Grading	Some portions may require fill land.	F
Expandability	While the entire property is extremely large, much of the land is not developable due to historic sites and military activities. Also, a good portion of the site is designated Preservation, thus leaving very little developable land (approximately 5 acres in an area accessible to the public).	P
Lot dimensions	Narrow portion approximately 250 feet.	G
COMMUNITY CHARACTERISTICS		
Government		
State Land Use	It is currently within State Land Use designation Urban.	G
ALISH	The land is not in Prime or Other Important Agricultural Lands (see Map 2-7).	G
Koolaupoko Sustainable Community Plan	Designated Preservation Land in the plan. However, its location adjacent to the shopping center meets the intent of the plan to concentrate commercial activities.	F
Special Management Plan (SMA)	Located in SMA.	P
Tsunami/Flood Hazard	Most of the area near the shopping center is Firm Zone X; however a good portion to the Kailua side is Firm Zone AE which has a 100 year flood rating. There is also a Floodway running along the side of the property.	F

Zoning	It is currently zoned Federal and Preservation which does not allow for the proposed use. Re-zoning or a variance through the City will be required.	P
Community Effects		
Use Compatibility	The property is adjacent to the commercial shopping center. Also, proximity to the highway will keep traffic and noise impact to a minimum.	G
Aesthetic Value	Would need to buffer the storage area from highway view, but could use shopping center as buffer.	G
Displacement	The portion desired for this project is currently unused.	G
<b>DEVELOPMENT CRITERIA</b>		
Land Cost	De-accessioning the property would put lands in DHHL management. DHHL requires market rate income generation.	p
Development Schedule	There would be many obstacles to obtaining the land for the WCBC project. First, the process of de-accessing federal land or divesting land from federal jurisdiction requires numerous steps before a private non-profit group such as the Waimanalo Construction Coalition or any newly formed group can be considered. Second, the property is within the SMA, which requires a special permit process.	P





#### 4.4 SUMMARY OF SITES EVALUATION

CRITERIA	Site						
	1A	1B	2	3	4	5	6
<b>PHYSICAL SITE CRITERIA</b>							
A. Utilities							
1. Water	G	P	G	G	G	G	F
2. Sewer	G	F	F	G	F	G	G
3. Power	G	G	G	G	G	G	G
B. Roadway and Accessibility							
1. Roadway improvement	P	P	P	G	G	G	G
2. Accessibility	P	P	G	F	G	F	F
C. Site Characteristics							
1. Slope	G	P	G	G	G	G	G
2. Site clearing	G	F	G	G	F	P	F
3. Grading	G	P	G	G	F	G	F
4. Expandability	G	G	G	P	F	F	P
5. Lot dimensions	G	G	G	G	G	F	G
<b>COMMUNITY CHARACTERISTICS</b>							
A. Government							
1. State land use	P	P	F	G	G	F	G
2. ALISH	G	G	G	G	F	P	G
3. Koolaupoko Sustainable Communities Plan	F	F	F	P	F	F	F
4. Special Management Area (SMA)	G	G	G	G	P	G	P
5. Tsunami / Flood hazard	G	G	G	P	P	F	F
6. Zoning	F	F	F	P	P	P	P
B. Community Effects							
1. Use compatibility	F	P	G	G	F	G	G
2. Aesthetic value	G	G	F	P	F	P	G
3. Displacement of existing uses / tenants	G	G	G	G	G	G	G
<b>LAND COST AND SCHEDULE</b>							
A. Land cost	G	P	G	G	G	G	P
B. Development Schedule	G	F	G	F	P	P	P
<b>GOOD</b> (3 points each)	15	8	15	14	10	10	10
<b>FAIR</b> (2 points each)	3	5	5	2	6	5	6
<b>POOR</b> (1 point each)	3	8	1	5	5	6	5
<b>TOTAL POINTS</b>	<b>54</b>	<b>42</b>	<b>56</b>	<b>51</b>	<b>47</b>	<b>46</b>	<b>47</b>

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#### 4.5 Ranking of Sites in Accordance to Site Criteria

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1. The combination of the Old Quarry and Nakini St. sites gathered the most points to be the best sites for the WCBC. This option is contingent on the ability to work with WHHA.
2. Option A, the Old Quarry site alone is also a good option but is contingent on the ability to work with WHHA.
3. Waimanalo Teen Project site. Utilization of this site is contingent on the cooperation of the lessee.
4. The Aruda property and the Bellows site both garnered the same amount of points.
5. DLNR Kakaina Street site. However, should the property be leased out for agriculture, this property will no longer meet the minimum criteria.
6. Option B of the Old Quarry site.

## SECTION 5: Conceptual Site Plan Design

### 5.0 Objective

---

The objective is to prepare a conceptual site plan for the top-rated site from the Site Selection Study in order to justify the adequacy of area for the development of the future Waimanalo Community Business Center, as well as to suggest certain design guidelines and direction for future design work. This study is not intended to be a final version of site, floor plan, and elevation design.

### 5.1 Concepts and Goals

---

Concepts or goals of the proposed site plan for Waimanalo Community Business Center (WCBC) are to:

- (1) Group the activities into three areas. The more commercial activities will be sited along the highway for maximum accessibility; the industrial activities will be in the back of the property to maximize buffering opportunities; and the educational, social, and cultural activities will be grouped with the *halau* to integrate existing structures and activities.
- (2) Provide room for growth and expansion.
- (3) Reflect and carry out the rural and residential flavor and context of the Waimanalo neighborhood.

### 5.2 Description of Design

---

In consideration of the concept, office/retail spaces are sited at the Nakini Street site since it is adjacent to Kalanianaʻole Highway. The location offers better public access and more visibility to this more commercial aspect of this project. Two options are studied, each with its advantages and disadvantages.

Option A includes the existing building on the Nakini Street. The advantage to this option is to be able to use the existing building until the program expands. The disadvantage is that the building was not constructed with offices or retail spaces in mind and will have to be retrofitted to be used properly.

Option B assumes the existing building will be removed which allows for more freedom in the siting of the new buildings. The concept behind keeping small individual buildings, as opposed to expanding one large building, was to keep the low, rural, residential feel of Waimanalo while maintaining the concept of the *hale* that began on DHHL lands.



The equipment storage, truck driver training, and truck parking facilities are sited above a large berm that is nestled in the back of the Old Quarry site to allow for buffering from residences and the various functions of the WCBC.

Vocational classrooms and a commercial kitchen are sited together with the existing *halau*, adding to the educational, social, and cultural activities. Design style of the building is similar to the *halau*. The proposed structures embrace the *halau*'s uniqueness, and are designed to complement the *halau*, not compete with it. A great advantage of utilizing this site is the opportunity to expand, as previously mentioned in our site study.

The proposed WCBC integrates and expands the existing structures and functions. Great consideration and thought were given to the concerns of neighbors as well as the community.

### 5.3 Probable Cost Estimate of Development- Old Quarry Site

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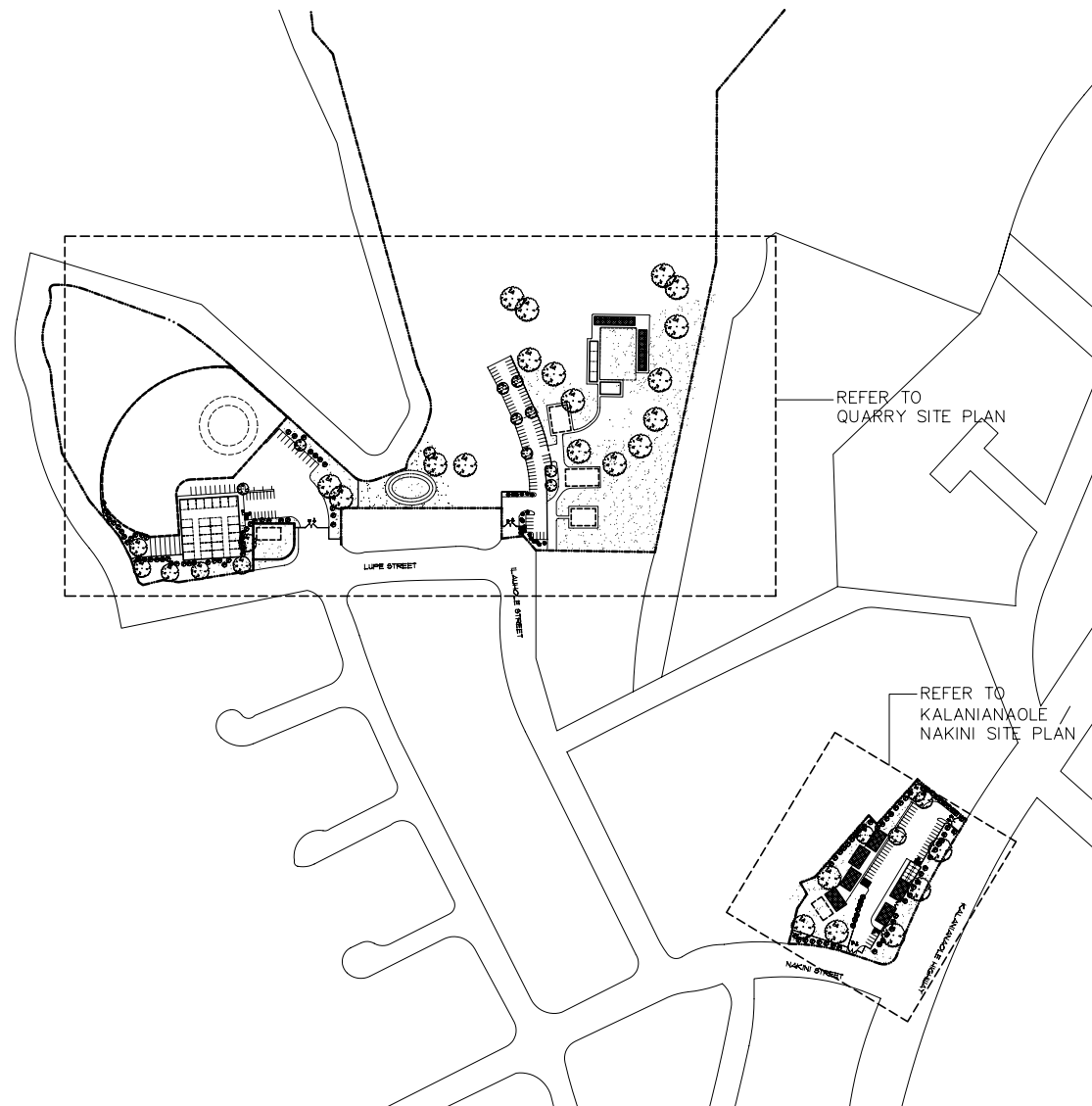
#### OFF SITE COSTS

Roadway	\$150,000
Water	\$200,000
Wastewater	\$200,000
<b>Total Off Site Probable Costs</b>	<b>\$550,000</b>

#### ON SITE COSTS

Site clearing, grading and paving	\$2,000,000
Buildings (including all structures, turn-key condition)	\$4,675,000
Landscaping	\$100,000
<b>Total On Site Probable Costs</b>	<b>\$6,775,000</b>

<b>TOTAL PROBABLE DEVELOPMENT COSTS</b>	<b>\$7,325,000</b>
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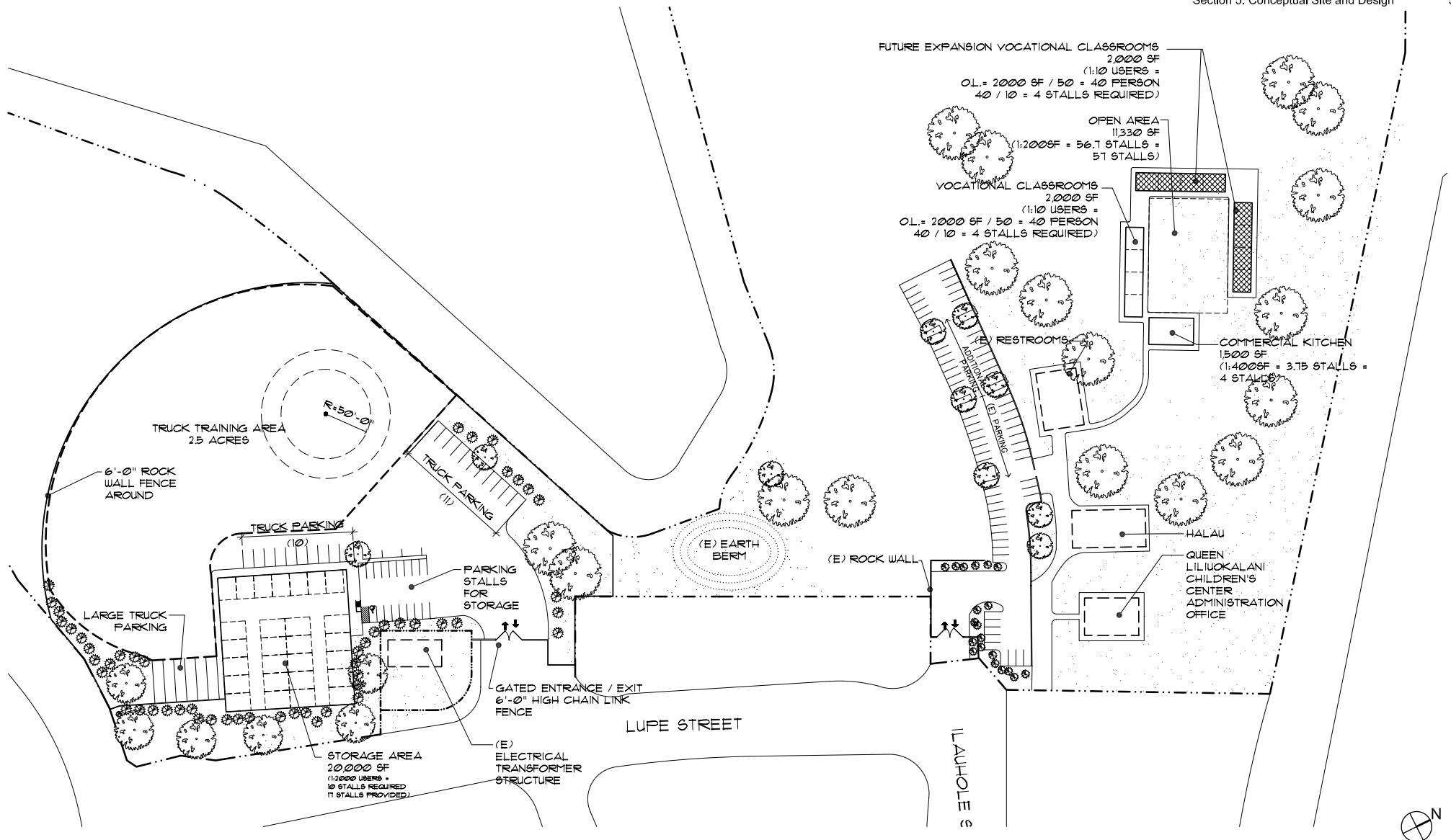
FUNG ASSOCIATES

# WAIMANALO COMMUNITY BUSINESS CENTER, WAIMANALO, HAWAII

Figure 5-1: QUARRY SITE PLAN - CONCEPTUAL  
TMK 4-1-008:002

JANUARY 2008



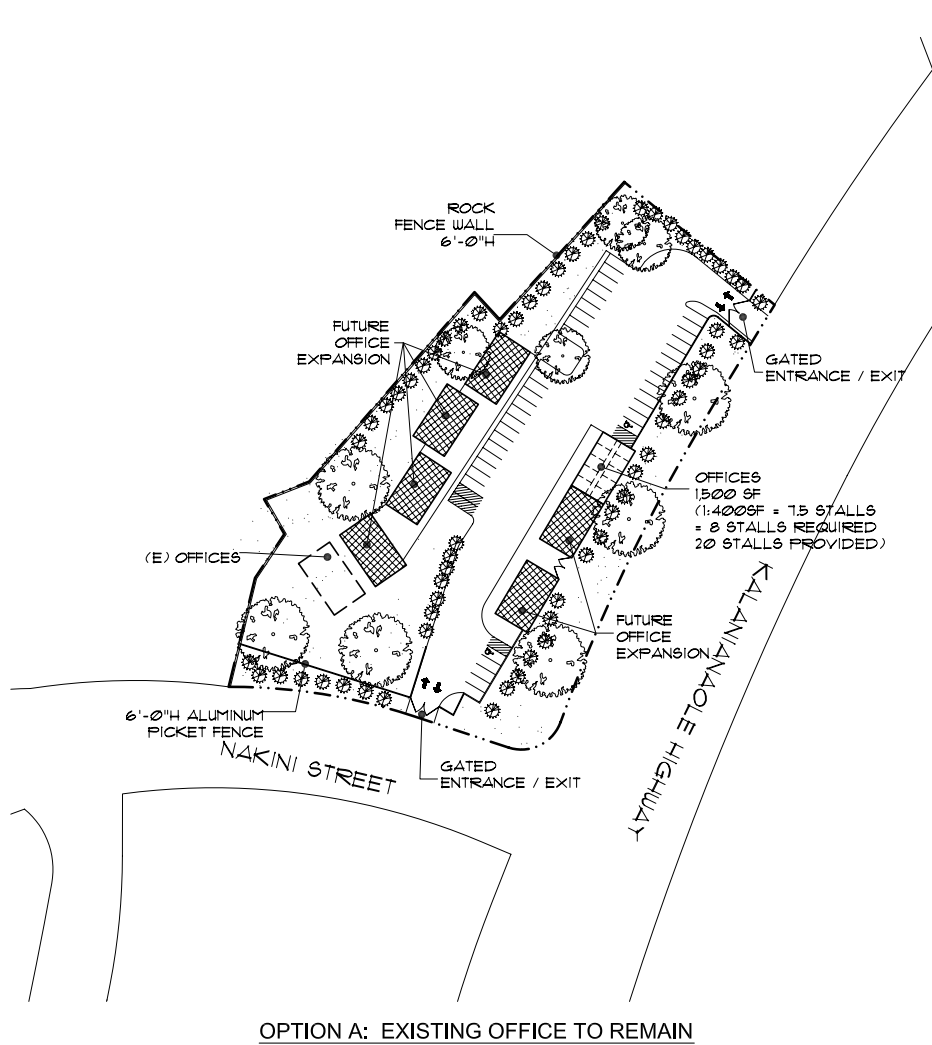


WAIMANALO COMMUNITY BUSINESS CENTER, WAIMANALO, HAWAII

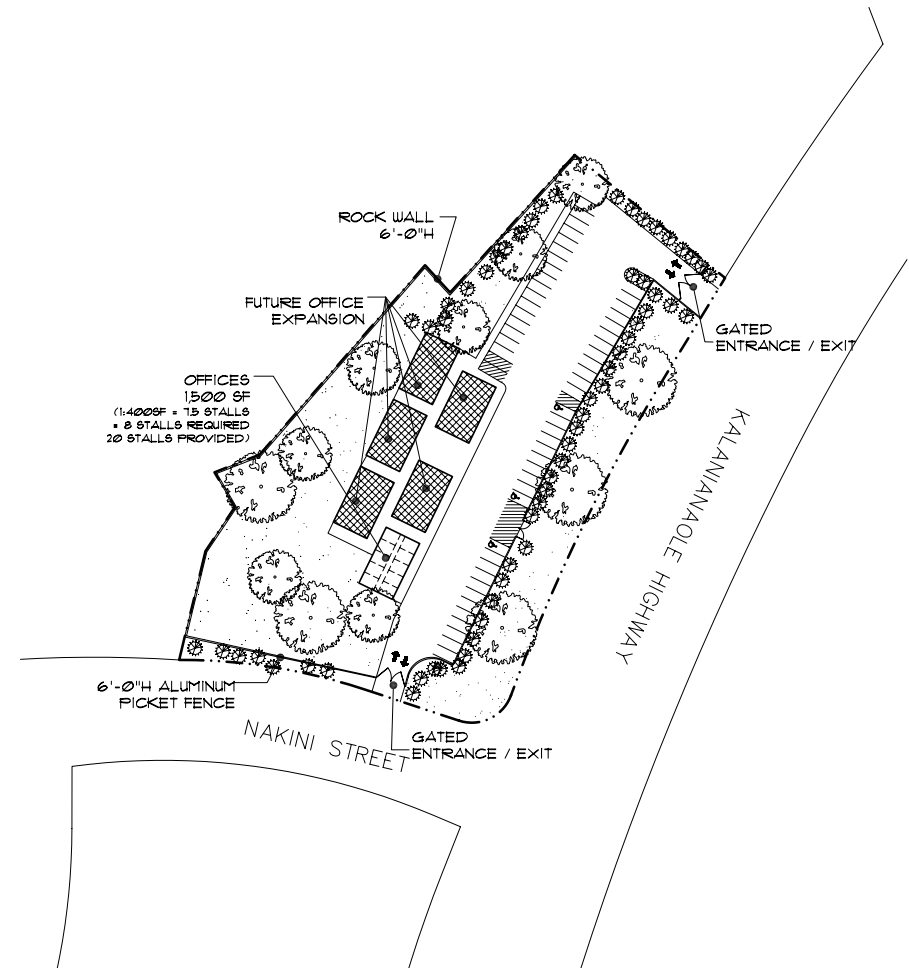
Figure 5-2: QUARRY SITE PLAN - CONCEPTUAL

JANUARY 2008

0' 50' 100' 150'



OPTION A: EXISTING OFFICE TO REMAIN



OPTION B: EXISTING OFFICE NOT TO REMAIN



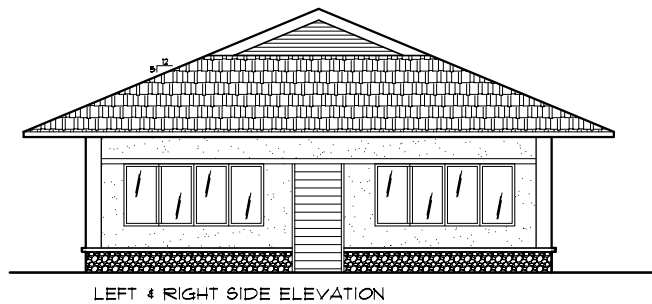
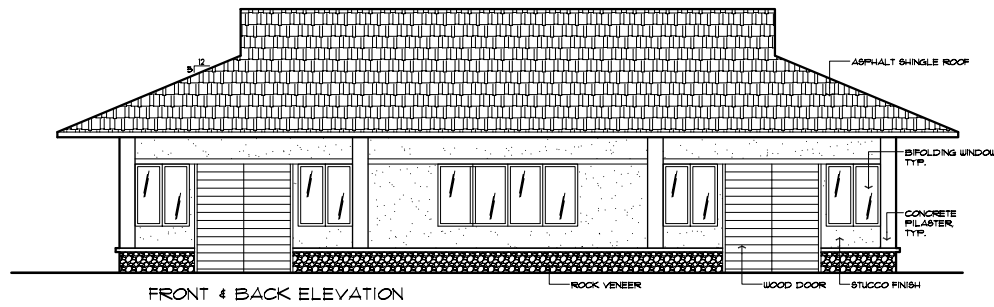
WAIMANALO COMMUNITY BUSINESS CENTER, WAIMANALO, HAWAII

Figure 5-3: QUARRY SITE PLAN - CONCEPTUAL

JANUARY 2008

0' 50' 100' 150'





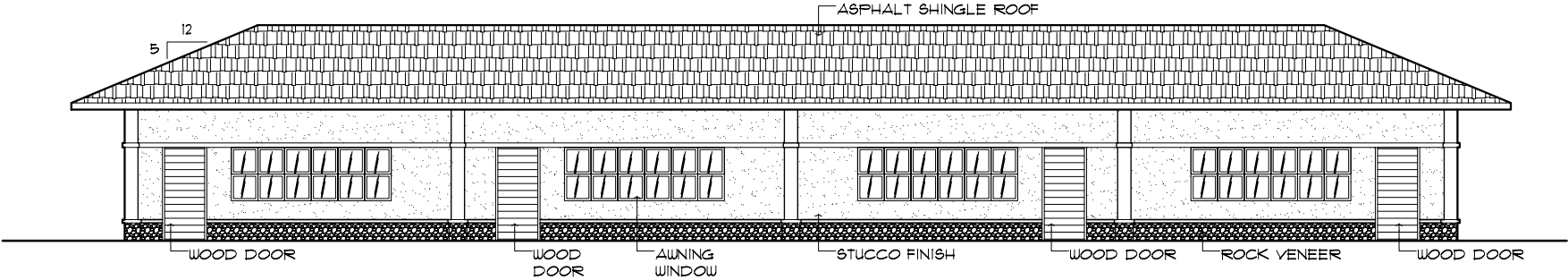
WAIMANALO COMMUNITY BUSINESS CENTER, WAIMANALO, HAWAII

Figure 5-4: COMMERCIAL KITCHEN EXTERIOR ELEVATIONS - CONCEPTUAL

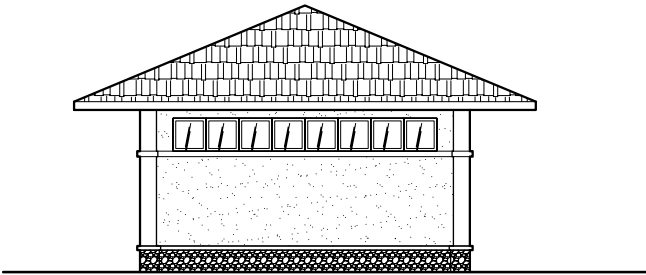


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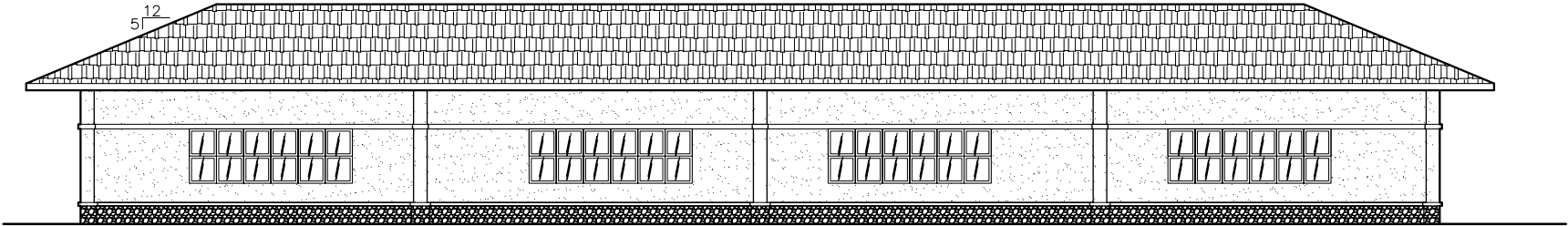
0' 4' 8' 12'



FRONT ELEVATION



LEFT AND RIGHT SIDE ELEVATION



REAR ELEVATION



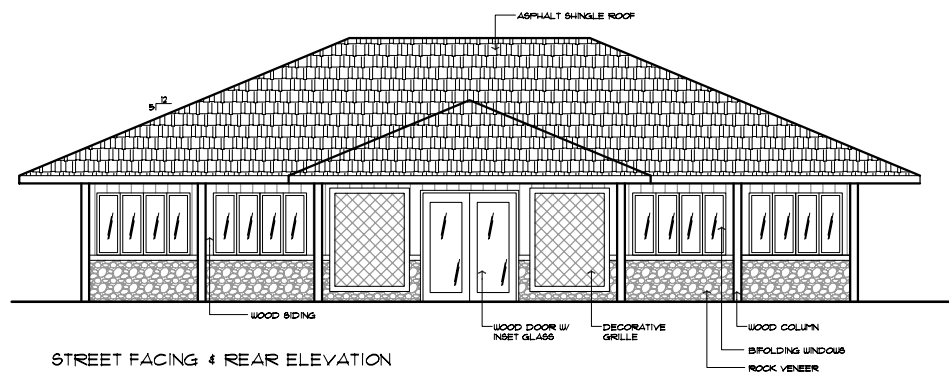
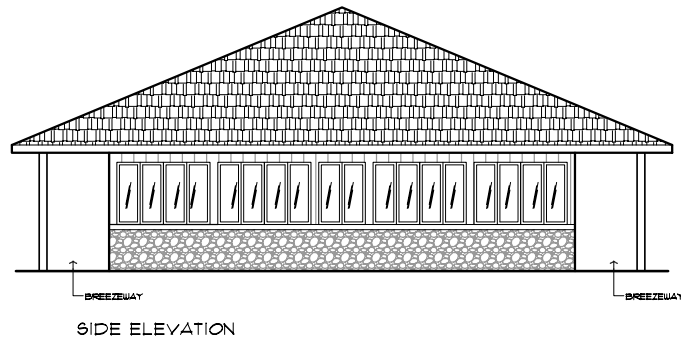
WAIMANALO COMMUNITY BUSINESS CENTER, WAIMANALO, HAWAII

Figure 5-5: CLASSROOM EXTERIOR ELEVATIONS - CONCEPTUAL



JANUARY 2008

0' 50' 100' 150'



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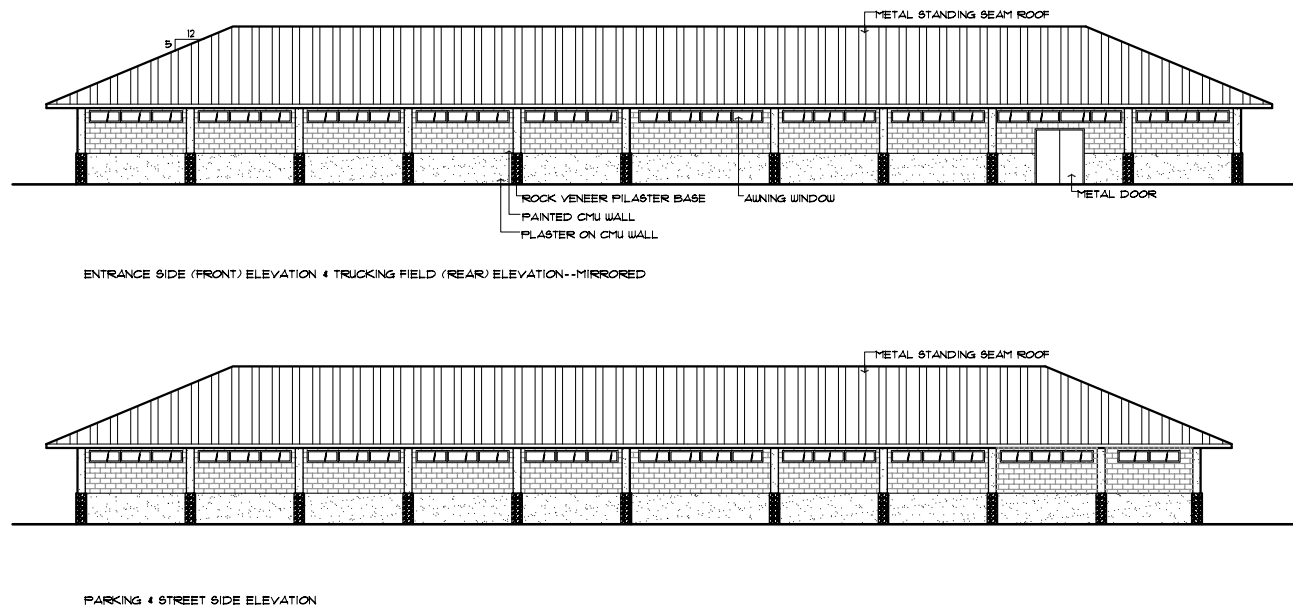
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Figure 5-6: OFFICE EXTERIOR ELEVATIONS - CONCEPTUAL



JANUARY 2008

0' 4' 8' 12'



WAIMANALO COMMUNITY BUSINESS CENTER, WAIMANALO, HAWAII

Figure 5-7: STORAGE EXTERIOR ELEVATIONS - CONCEPTUAL



JANUARY 2008



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**Meetings**

Site visits to Waimanalo with Tony Sang and Andrew Jamila, August 05, 2003

Waimanalo Neighborhood Board Meetings, May 10, 2004, July 09, 2007

Meeting with Department of Hawaiian Homelands, Land Division Administrator and Staff, May 27, 2004

Meeting with Department of Land and Natural Resources, Land Division Administrator and Staff, June 16, 2004, January 25, 2005

Waimanalo Agriculture Association Meeting, January 13, 2005

Meeting with Tony Sang and Andrew Jamila January 20, 2005

Advisory Committee Meetings, May 24, 2004, August 24, 2004, May 23, 2006, June 21, 2006, May 29, 2007

Meeting with Waimanalo Hawaiian Homes Association Board, January 31, 2005